Microsoft

Exam Questions DP-300

Administering Relational Databases on Microsoft Azure (beta)

NEW QUESTION 1
- (Exam Topic 5)
You create a new Azure SQL managed instance named SQL1 and enable Database Mail extended stored You need to ensure that SQ Server Agent jobs running on SQL 1 can notify when a failure Occurs
Which three actions should you perform in sequence 7 TO answer. move the appropriate actions from the list Of actions to answer area and arrange them in correct order.

A. Mastered
B. Not Mastered

Answer: A

Explanation:

NEW QUESTION 2
- (Exam Topic 5)
You have 20 Azure SQL databases provisioned by using the vCore purchasing model. You plan to create an Azure SQL Database elastic pool and add the 20 databases.
Which three metrics should you use to size the elastic pool to meet the demands of your workload? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A. total size of all the databases
B. geo-replication support
C. number of concurrently peaking databases * peak CPU utilization per database
D. maximum number of concurrent sessions for all the databases
E. total number of databases * average CPU utilization per database

Answer: ACE

Explanation:
CE: Estimate the vCores needed for the pool as follows:
For vCore-based purchasing model: MAX(<Total number of DBs X average vCore utilization per DB>,
<Number of concurrently peaking DBs X Peak vCore utilization per DB>)
A: Estimate the storage space needed for the pool by adding the number of bytes needed for all the databases in the pool.
Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/database/elastic-pool-overview

NEW QUESTION 3
- (Exam Topic 5)
You have an Azure SQL Database managed instance named sqldbmi1 that contains a database name Sales. You need to initiate a backup of Sales.
How should you complete the Transact-SQL statement? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

BACKUP DATABASE Sales

▼
TO DISK = \\BackupSystem\BackupDisk1\Sales.bak'
TO DISK = 'X:\BAK\Sales.bak'
TO 'Sales_Backup'
TO URL = 'https://storage1.blob.core.windows.net/blob1/Sales.bak'

WITH STATS = 5,

▼
WITH COPY_ONLY;
WITH ENCRYPTION;
WITH FILE_SNAPSHOT;
WITH NO_TRUNCATE

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Box 1: TO URL = 'https://storage1.blob.core.windows.net/blob1/Sales.bak' Native database backup in Azure SQL Managed Instance.
You can backup any database using standard BACKUP T-SQL command: BACKUP DATABASE tpcc2501
TO URL = 'https://myacc.blob.core.windows.net/testcontainer/tpcc2501.bak'
WITH COPY_ONLY
Box 2: WITH COPY_ONLY
Reference:
https://techcommunity.microsoft.com/t5/azure-sql-database/native-database-backup-in-azure-sql-managed-insta

NEW QUESTION 4
- (Exam Topic 5)
You have an Azure SQL Database server named sqlsrv1 that hosts 10 Azure SQL databases. The databases perform slower than expected.
You need to identify whether the performance issue relates to the use of tempdb on sqlsrv1. What should you do?

A. Run Query Store-based queries
B. Review information provided by SQL Server Profiler-based traces
C. Review information provided by Query Performance Insight
D. Run dynamic management view-based queries

Answer: D

Explanation:
The diagnostics log outputs tempDB contention details. You can use the information as the starting point for troubleshooting.
You can use the Intelligent Insights performance diagnostics log of Azure SQL Database to troubleshoot performance issues.
Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/database/intelligent-insights-troubleshoot-performance#tempdb https://docs.microsoft.com/en-us/azure/azure-sql/database/intelligent-insights-use-diagnostics-log

NEW QUESTION 5
- (Exam Topic 5)
You have SQL Server on an Azure virtual machine that contains a database named DB1. The database reports a CHECKSUM error.
You need to recover the database.
How should you complete the statements? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

```
USE master;

ALTER DATABASE [DB1] SET  [               ▼]  WITH ROLLBACK IMMEDIATE;
                           OFFLINE
GO                         ONLINE
                           SINGLE_USER
                           TRUSTWORTHY


DBCC CHECKDB ('DB1',       [               ▼]  WITH NO_INFOMSGS;
                           MOINDEX
GO                         PHYSICAL_ONLY
                           REPAIR_ALLOW_DATA_LOSS
                           REPAIR_FAST


ALTER DATABASE [DB1] SET   [               ▼]
                           MULTI_USER;
GO                         ONLINE;
                           OPEN;
                           TRUSTWORTHY;
```

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Box 1: SINGLE_USER
The specified database must be in single-user mode to use one of the following repair options. Box 2: REPAIR_ALLOW_DATA_LOSS
REPAIR_ALLOW_DATA_LOSS tries to repair all reported errors. These repairs can cause some data loss.
Note: The REPAIR_ALLOW_DATA_LOSS option is a supported feature but it may not always be the best option for bringing a database to a physically consistent state. If successful, the REPAIR_ALLOW_DATA_LOSS option may result in some data loss. In fact, it may result in more data lost than if a user were to restore the database from the last known good backup.
Reference:
https://docs.microsoft.com/en-us/sql/t-sql/database-console-commands/dbcc-checkdb-transact-sql

NEW QUESTION 6
- (Exam Topic 5)
You have an Azure SQL database named DB 1 in the General Purpose service tier. You need to monitor DB 1 by using SQL Insights.
What should you include in the solution? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

```
To collect monitoring data, use:  [                    ▼]
                                   A virtual machine
                                   An Azure function
                                   The Azure Monitor agent


To store monitoring data, create: [                    ▼]
                                   A Log Analytics workspace
                                   An Azure SQL database
                                   An Azure Storage account
```

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Box 1 = Azure Monitor Agent Box 2 = An Azure SQL database
https://docs.microsoft.com/en-us/azure/azure-sql/database/sql-database-paas-overview?view=azuresql

NEW QUESTION 7
- (Exam Topic 5)
You are creating a managed data warehouse solution on Microsoft Azure.
You must use PolyBase to retrieve data from Azure Blob storage that resides in parquet format and load the data into a large table called FactSalesOrderDetails.
You need to configure Azure Synapse Analytics to receive the data.
Which four actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions

| Create an external data source for Azure Blob storage. |
| Create a master key on database. |
| Enable Transparent Data Encryption. |
| Create the external table FactSalesOrderDetails. |
| Load the data to a staging table. |
| Create an external file format to map the parquet files. |

Answer Area

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Graphical user interface, text, application, chat or text message Description automatically generated
To query the data in your Hadoop data source, you must define an external table to use in Transact-SQL queries. The following steps describe how to configure the external table.
Step 1: Create a master key on database.
* 1. Create a master key on the database. The master key is required to encrypt the credential secret. (Create a database scoped credential for Azure blob storage.)
Step 2: Create an external data source for Azure Blob storage.
* 2. Create an external data source with CREATE EXTERNAL DATA SOURCE.. Step 3: Create an external file format to map the parquet files.
* 3. Create an external file format with CREATE EXTERNAL FILE FORMAT. Step 4. Create an external table FactSalesOrderDetails
* 4. Create an external table pointing to data stored in Azure storage with CREATE EXTERNAL TABLE. Reference:
https://docs.microsoft.com/en-us/sql/relational-databases/polybase/polybase-configure-azure-blob-storage

NEW QUESTION 8
- (Exam Topic 5)
You have a Microsoft SQL Server 2019 database named DB1 that uses the following database-level and instance-level features.

⟩ Clustered columnstore indexes

⟩ Automatic tuning

⟩ Change tracking

⟩ PolyBase

You plan to migrate DB1 to an Azure SQL database.
What feature should be removed or replaced before DB1 can be migrated?

A. Clustered columnstore indexes
B. PolyBase
C. Change tracking
D. Automatic tuning

Answer: B

Explanation:
This table lists the key features for PolyBase and the products in which they're available.

Feature	SQL Server (Beginning with 2016)	Azure SQL Database	Azure Synapse Analytics	Parallel Data Warehouse
Query Hadoop data with Transact-SQL	Yes	No	No	Yes
Import data from Hadoop	Yes	No	No	Yes
Export data to Hadoop	Yes	No	No	Yes
Query, import from, export to Azure HDInsight	No	No	No	No
Push down query computations to Hadoop	Yes	No	No	Yes
Import data from Azure Blob storage	Yes	Yes*	Yes	Yes
Export data to Azure Blob storage	Yes	No	Yes	Yes
Import data from Azure Data Lake Store	No	No	Yes	No
Export data to Azure Data Lake Store	No	No	Yes	No
Run PolyBase queries from Microsoft BI tools	Yes	No	Yes	Yes

Reference:
https://docs.microsoft.com/en-us/sql/relational-databases/polybase/polybase-versioned-feature-summary

NEW QUESTION 9
- (Exam Topic 5)
You have an Azure SQL managed instance.
You need to restore a database named DB1 by using Transact-SQL.
Which command should you run? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

```
RESTORE [ ▼ ] DB1 FROM [                                          ▼ ]
         DATABASE            DISK = N'\\NAS01\$SQLBackups\DB1.bak';
         FILE                TAPE = N'\\.\Tape0'
         LOG                 URL = N'https://mybackups.blob.core.windows.net/bkups/DB1.bak'
```

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Text Description automatically generated

NEW QUESTION 10
- (Exam Topic 5)
You have an Azure subscription that is linked to an Azure AD tenant named contoso.com. The subscription contains an Azure SQL database named SQL 1 and an Azure web named app1. App1 has the managed identity feature enabled. You need to create a new database user for app1.
How should you complete the Transact-SQL statement? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

```
CREATE USER [              ▼ ] FROM [              ▼ ]
            [App1]                    login
            [Contoso\app1]            Windows
            [App1@contoso.com]        EXTERNAL PROVIDER
```

A. Mastered
B. Not Mastered

Answer: A

Explanation:
https://learn.microsoft.com/en-us/azure/app-service/tutorial-connect-msi-sql-database?tabs=windowsclient%2Ce

NEW QUESTION 10

- (Exam Topic 5)
You have an Azure SQL database named DB1. You run a query while connected to DB1.
You review the actual execution plan for the query, and you add an index to a table referenced by the query. You need to compare the previous actual execution plan for the query to the Live Query Statistics.
What should you do first in Microsoft SQL Server Management Studio (SSMS)?

A. For DB1, set QUERY_CAPTURE_MODE of Query Store to All.
B. Run the SET SHOWPLAN_ALL Transact-SQL statement.
C. Save the actual execution plan.
D. Enable Query Store for DB1.

Answer: C

Explanation:
The Plan Comparison menu option allows side-by-side comparison of two different execution plans, for easier identification of similarities and changes that explain the different behaviors for all the reasons stated above. This option can compare between:
Two previously saved execution plan files (.sqlplan extension).
One active execution plan and one previously saved query execution plan. Two selected query plans in Query Store.

NEW QUESTION 12
- (Exam Topic 5)
You have a new Azure SQL database. The database contains a column that stores confidential information. You need to track each time values from the column are returned in a query. The tracking information must be stored for 365 days from the date the query was executed.
Which three actions should you perform? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A. Turn on auditing and write audit logs to an Azure Storage account.
B. Add extended properties to the column.
C. Turn on Advanced Data Security for the Azure SQL server.
D. Apply sensitivity labels named Highly Confidential to the column.
E. Turn on Azure Advanced Threat Protection (ATP).

Answer: ACD

Explanation:
C: Advanced Data Security (ADS) is a unified package for advanced SQL security capabilities. ADS is available for Azure SQL Database, Azure SQL Managed Instance, and Azure Synapse Analytics. It includes functionality for discovering and classifying sensitive data
D: You can apply sensitivity-classification labels persistently to columns by using new metadata attributes that have been added to the SQL Server database engine. This metadata can then be used for advanced,
sensitivity-based auditing and protection scenarios.
A: An important aspect of the information-protection paradigm is the ability to monitor access to sensitive data. Azure SQL Auditing has been enhanced to include a new field in the audit log called data_sensitivity_information. This field logs the sensitivity classifications (labels) of the data that was returned by a query. Here's an example:

d	client_ip	application_name	duration_milliseconds	response_rows	affected_rows	connection_id	data_sensitivity_information
	7.125	Microsoft SQL Server Management Studio - Query	1	847	847	C244A066-2271-...	Confidential - GDPR
	7.125	Microsoft SQL Server Management Studio - Query	2	32	32	C244A066-2271-...	Confidential
	7.125	Microsoft SQL Server Management Studio - Query	41	32	32	A7088FD4-759E-...	Confidential, Confidential - GDPR

Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/database/data-discovery-and-classification-overview

NEW QUESTION 13
- (Exam Topic 5)
You have the following Transact-SQL query.

```
SELECT
      [file_id] AS [File ID],
      [type] AS [File Type],
      substring([physical_name], 1,1) AS [Drive],
      [name] AS [Logical Name],
      [physical_name] AS [Physical Name],
      CAST([size] as DECIMAL(38,0))/128.0 AS [ColumnA],
      CAST(FILEPROPERTY([name], 'SpaceUsed') AS DECIMAL(38,0))/128.0 AS
[ColumnB],
      (CAST([size] AS DECIMAL(38,0))/128.0) - (CAST(FILEPROPERTY([name],
'SpaceUsed') AS DECIMAL (38,0))/128.0) AS [ColmnC],
      [max_size] AS [ColumnD],
      [is_percent_growth] AS [Percent Growth Enabled],
      [growth] AS [Growth Rate],
      SYSDATETIME() AS [Current Date]
FROM sys.database_files;
```

Which column returned by the query represents the free space in each file?

A. ColumnA
B. ColumnB

C. ColumnC
D. ColumnD

Answer: C

Explanation:
 Example:
Free space for the file in the below query result set will be returned by the FreeSpaceMB column.
SELECT DB_NAME() AS DbName,
name AS FileName, type_desc,
size/128.0 AS CurrentSizeMB,
size/128.0 - CAST(FILEPROPERTY(name, 'SpaceUsed') AS INT)/128.0 AS FreeSpaceMB FROM sys.database_files
WHERE type IN (0,1);
Reference:
https://www.sqlshack.com/how-to-determine-free-space-and-file-size-for-sql-server-databases/

NEW QUESTION 14
- (Exam Topic 5)
You plan to create a table in an Azure Synapse Analytics dedicated SQL pool.
Data in the table will be retained for five years. Once a year, data that is older than five years will be deleted. You need to ensure that the data is distributed evenly across partitions. The solutions must minimize the
amount of time required to delete old data.
How should you complete the Transact-SQL statement? To answer, drag the appropriate values to the correct targets. Each value may be used once, more than once, or not at all.
You may need to drag the split bar between panes or scroll to view content.
NOTE: Each correct selection is worth one point.

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Graphical user interface, text, application Description automatically generated
Box 1: HASH
Box 2: OrderDateKey
In most cases, table partitions are created on a date column.
A way to eliminate rollbacks is to use Metadata Only operations like partition switching for data management. For example, rather than execute a DELETE
statement to delete all rows in a table where the order_date was in October of 2001, you could partition your data early. Then you can switch out the partition with
data for an empty partition from another table.
Reference:
https://docs.microsoft.com/en-us/sql/t-sql/statements/create-table-azure-sql-data-warehouse https://docs.microsoft.com/en-us/azure/synapse-analytics/sql/best-practices-dedicated-sql-pool

NEW QUESTION 17
- (Exam Topic 5)
You have an Azure subscription that is linked to a hybrid Azure Active Directory (Azure AD) tenant. The subscription contains an Azure Synapse Analytics SQL
pool named Pool1.
You need to recommend an authentication solution for Pool1. The solution must support multi-factor authentication (MFA) and database-level authentication.
Which authentication solution or solutions should you include in the recommendation? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

MFA:

▼
Azure AD authentication
Microsoft SQL Server authentication
Passwordless authentication
Windows authentication

Database-level authentication:

▼
Application roles
Contained database users
Database roles
Microsoft SQL Server logins

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Graphical user interface, text, application, chat or text message Description automatically generated
Box 1: Azure AD authentication
Azure Active Directory authentication supports Multi-Factor authentication through Active Directory
Universal Authentication.
Box 2: Contained database users
Azure Active Directory Uses contained database users to authenticate identities at the database level. Reference:
https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-authentication

NEW QUESTION 20
- (Exam Topic 5)
You are building an Azure virtual machine.
You allocate two 1-TiB, P30 premium storage disks to the virtual machine. Each disk provides 5,000 IOPS. You plan to migrate an on-premises instance of
Microsoft SQL Server to the virtual machine. The instance has a database that contains a 1.2-TiB data file. The database requires 10,000 IOPS.
You need to configure storage for the virtual machine to support the database.
Which three objects should you create in sequence? To answer, move the appropriate objects from the list of objects to the answer area and arrange them in the
correct order.

Actions

a virtual disk that uses the stripe layout
a virtual disk that uses the mirror layout
a volume
a virtual disk that uses the simple layout
a storage pool

Answer Area

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Follow these same steps to create striped virtual disk:
➢ Create Log Storage Pool.
➢ Create Virtual Disk
➢ Create Volume
Box 1: a storage pool
Box 2: a virtual disk that uses stripe layout
Disk Striping: Use multiple disks and stripe them together to get a combined higher IOPS and Throughput limit. The combined limit per VM should be higher than
the combined limits of attached premium disks.
Box 3: a volume Reference:
https://hanu.com/hanu-how-to-striping-of-disks-for-azure-sql-server/

NEW QUESTION 21
- (Exam Topic 5)
You have an Azure SQL database named db1 on a server named server1.
The Intelligent Insights diagnostics log identifies queries that cause performance issues due to tempDB contention.
You need to resolve the performance issues. What should you do?

A. Implement memory-optimized tables.
B. Run the dbcc flushprocindB command.
C. Replace the sequential index keys with nonsequential keys.
D. Run the dbcc dbreindex command.

Answer: A

Explanation:
Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/database/intelligent-insights-troubleshoot-performance#tempdb

NEW QUESTION 24
- (Exam Topic 5)
You have two on-premises Microsoft SQL Server 2019 instances named SQL1 and SQL2.
You need to migrate the databases hosted on SQL 1 to Azure. The solution must meet the following requirements:
The service that hosts the migrated databases must be able to communicate with SQL2 by using linked server connections.
Administrative effort must be minimized. What should you use to host the databases?

A. a single Azure SQL database
B. an Azure SQL Database elastic pool
C. SQL Server on Azure Virtual Machines
D. Azure SQL Managed Instance

Answer: D

NEW QUESTION 25
- (Exam Topic 5)
You have SQL Server on Azure virtual machines in an availability group. You have a database named DB1 that is NOT in the availability group.
You create a full database backup of DB1. You need to add DB1 to the availability group.
Which restore option should you use on the secondary replica?

A. Restore with Recovery
B. Restore with Norecovery
C. Restore with Standby

Answer: B

Explanation:
Prepare a secondary database for an Always On availability group requires two steps:
* 1. Restore a recent database backup of the primary database and subsequent log backups onto each server instance that hosts the secondary replica, using RESTORE WITH NORECOVERY
* 2. Join the restored database to the availability group. Reference:
https://docs.microsoft.com/en-us/sql/database-engine/availability-groups/windows/manually-prepare-asecondary database-for-an-availability-group-sql-server

NEW QUESTION 30
- (Exam Topic 5)
You have an Azure virtual machine based on a custom image named VM1. VM1 hosts an instance of Microsoft SQL Server 2019 Standard.
You need to automate the maintenance of VM1 to meet the following requirements: Automate the patching of SQL Server and Windows Server.
Automate full database backups and transaction log backups of the databases on VM1.
Minimize administrative effort. What should you do first?

A. Enable a system-assigned managed identity for VM1
B. Register VM1 to the Microsoft.Sql resource provider
C. Install an Azure virtual machine Desired State Configuration (DSC) extension on VM1
D. Register VM1 to the Microsoft.SqlVirtualMachine resource provider

Answer: B

Explanation:
Automated Patching depends on the SQL Server infrastructure as a service (IaaS) Agent Extension. The SQL Server IaaS Agent Extension (SqlIaasExtension) runs on Azure virtual machines to automate administration
tasks. The SQL Server IaaS extension is installed when you register your SQL Server VM with the SQL Server VM resource provider.
Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/virtual-machines/windows/sql-server-iaas-agent-extensionauto

NEW QUESTION 35
- (Exam Topic 5)
You are building a database in an Azure Synapse Analytics serverless SQL pool. You have data stored in Parquet files in an Azure Data Lake Storage Gen2
container. Records are structured as shown in the following sample.

```
{
    "id":123,
    "address_housenumber": "19c",
    "address_line1": "Memory Lane",
    "applicant1_name": "Jane",
    "applicant2_name": "Dev"
}
```

The records contain two applicants at most.
You need to build a table that includes only the address fields.
How should you complete the Transact-SQL statement? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

```
                        ▼  applications
CREATE EXTERNAL TABLE
CREATE TABLE
CREATE VIEW
WITH (
    LOCATION = 'applications/',
    DATA_SOURCE = applications_ds,
    FILE_FORMAT = applications_file_format
)
AS
SELECT id, [address_housenumber] as addressnumber, [address_line1]
as addressline1
FROM
                        ▼  (BULK 'https://contoso1.dfs.core.windows.net/
CROSS APPLY               applications/year=*/*.parquet',
OPENJSON
OPENROWSET

        FORMAT = 'PARQUET') AS [r]
GO
```

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Graphical user interface, text, application Description automatically generated
Box 1: CREATE EXTERNAL TABLE
An external table points to data located in Hadoop, Azure Storage blob, or Azure Data Lake Storage. External tables are used to read data from files or write data to files in Azure Storage. With Synapse SQL, you can use external tables to read external data using dedicated SQL pool or serverless SQL pool.
Syntax:
CREATE EXTERNAL TABLE { database_name.schema_name.table_name | schema_name.table_name | table_name }
(<column_definition> [,...n]) WITH (
LOCATION = 'folder_or_filepath', DATA_SOURCE = external_data_source_name, FILE_FORMAT = external_file_format_name Box 2. OPENROWSET
When using serverless SQL pool, CETAS is used to create an external table and export query results to Azure Storage Blob or Azure Data Lake Storage Gen2.
Example: AS
SELECT decennialTime, stateName, SUM(population) AS population FROM
OPENROWSET(BULK
'https://azureopendatastorage.blob.core.windows.net/censusdatacontainer/release/us_population_county/year=*/
FORMAT='PARQUET') AS [r]
GROUP BY decennialTime, stateName GO
Reference:
https://docs.microsoft.com/en-us/azure/synapse-analytics/sql/develop-tables-external-tables

NEW QUESTION 39
- (Exam Topic 5)
You have a database on a SQL Server on Azure Virtual Machines instance.
The current state of Query Store for the database is shown in the following exhibit.

General	
Operation Mode (Actual)	Read only
Operation Mode (Requested)	**Read write**
Monitoring	
Data Flush Interval (Minutes)	15

Answer Area

Query Store will retain [answer choice] queries for evaluation. ▼

To change Operation Mode (Actual) to Read write without losing any data, you must modify the [answer choice] setting. ▼

To change Operation Mode (Actual) to Read write without losing any data, you must modify the [answer choice] setting. ▼

- Max Size (MB)
- Query Store Capture Mode
- Size Based Cleanup Mode
- **Operation Mode (Requested)**

Query Store will retain [answer choice] queries for evaluation. ▼

- all
- none of the
- a selective set of

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Graphical user interface, text Description automatically generated

NEW QUESTION 43
- (Exam Topic 5)
You have an Azure SQL Database instance named DatabaseA on a server named Server1.
You plan to add a new user named App1 to DatabaseA and grant App1 db_datacenter permissions. App1 will use SQL Server Authentication.
You need to create App1. The solution must ensure that App1 can be given access to other databases by using the same credentials.
Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions

On the master database, run CREATE LOGIN [APP1] FROM EXTERNAL PROVIDER;

On DatabaseA, run CREATE USER [APP1] WITH PASSWORD = 'P@ssW0rd!';

On DatabaseA, run ALTER ROLE db_datareader ADD MEMBER [App1];

On the master database, run CREATE LOGIN [App1] WITH PASSWORD = 'P@aaW0rd!';

On DatabaseA, run CREATE USER [App1] FROM LOGIN [App1];

Answer Area

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Step 1: On the master database, run CREATE LOGIN [App1] WITH PASSWORD = 'p@aaW0rd!'
Logins are server wide login and password pairs, where the login has the same password across all databases. Here is some sample Transact-SQL that creates a login:
CREATE LOGIN readonlylogin WITH password='1231!#ASDF!a';
You must be connected to the master database on SQL Azure with the administrative login (which you get from the SQL Azure portal) to execute the CREATE LOGIN command.
Step 2: On DatabaseA, run CREATE USER [App1] FROM LOGIN [App1]
Users are created per database and are associated with logins. You must be connected to the database in where you want to create the user. In most cases, this is not the master database. Here is some sample Transact-SQL that creates a user:
CREATE USER readonlyuser FROM LOGIN readonlylogin;
Step 3: On DatabaseA run ALTER ROLE db_datareader ADD Member [App1]
Just creating the user does not give them permissions to the database. You have to grant them access. In the Transact-SQL example below the readonlyuser is given read only permissions to the database via the db_datareader role.
EXEC sp_addrolemember 'db_datareader', 'readonlyuser'; Reference:
https://azure.microsoft.com/en-us/blog/adding-users-to-your-sql-azure-database/

NEW QUESTION 48
- (Exam Topic 5)
You have an Azure data solution that contains an enterprise data warehouse in Azure Synapse Analytics named DW1.
Several users execute adhoc queries to DW1 concurrently. You regularly perform automated data loads to DW1.
You need to ensure that the automated data loads have enough memory available to complete quickly and successfully when the adhoc queries run.
What should you do?

A. Assign a smaller resource class to the automated data load queries.
B. Create sampled statistics to every column in each table of DW1.
C. Assign a larger resource class to the automated data load queries.
D. Hash distribute the large fact tables in DW1 before performing the automated data loads.

Answer: C

Explanation:
The performance capacity of a query is determined by the user's resource class.
Smaller resource classes reduce the maximum memory per query, but increase concurrency. Larger resource classes increase the maximum memory per query, but reduce concurrency. Reference:
https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/resource-classes-for-workloadman

NEW QUESTION 53
- (Exam Topic 5)
You are developing an application that uses Azure Data Lake Storage Gen 2.
You need to recommend a solution to grant permissions to a specific application for a limited time period. What should you include in the recommendation?

A. role assignments
B. account keys
C. shared access signatures (SAS)
D. Azure Active Directory (Azure AD) identities

Answer: C

Explanation:
A shared access signature (SAS) provides secure delegated access to resources in your storage account. With a SAS, you have granular control over how a client can access your data. For example:
What resources the client may access.
What permissions they have to those resources. How long the SAS is valid.
Note: Data Lake Storage Gen2 supports the following authorization mechanisms:

≫ Shared Key authorization

≫ Shared access signature (SAS) authorization

≫ Role-based access control (Azure RBAC)

≫ Shared Key authorization

≫ Shared access signature (SAS) authorization

≫ Role-based access control (Azure RBAC)

≫ Access control lists (ACL)

Reference:
https://docs.microsoft.com/en-us/azure/storage/common/storage-sas-overview

NEW QUESTION 54
- (Exam Topic 5)
You deploy a database to an Azure SQL Database managed instance.
You need to prevent read queries from blocking queries that are trying to write to the database. Which database option should set?

A. PARAMETERIZATION to FORCED
B. PARAMETERIZATION to SIMPLE
C. Delayed Durability to Forced
D. READ_COMMITTED_SNAPSHOT to ON

Answer: D

Explanation:
In SQL Server, you can also minimize locking contention while protecting transactions from dirty reads of uncommitted data modifications using either:

≫ The READ COMMITTED isolation level with the READ_COMMITTED_SNAPSHOT database option set to ON.

≫ The SNAPSHOT isolation level.

If READ_COMMITTED_SNAPSHOT is set to ON (the default on SQL Azure Database), the Database Engine uses row versioning to present each statement with a transactionally consistent snapshot of the data as it existed at the start of the statement. Locks are not used to protect the data from updates by other transactions.
Reference:
https://docs.microsoft.com/en-us/sql/t-sql/statements/set-transaction-isolation-level-transact-sql

NEW QUESTION 58
- (Exam Topic 5)
You have an on-premises multi-tier application named App1 that includes a web tier, an application tier, and a Microsoft SQL Server tier. All the tiers run on Hyper-V virtual machines.
Your new disaster recovery plan requires that all business-critical applications can be recovered to Azure. You need to recommend a solution to fail over the database tier of App1 to Azure. The solution must provide the ability to test failover to Azure without affecting the current environment.
What should you include in the recommendation?

A. Azure Backup
B. Azure Information Protection
C. Windows Server Failover Cluster
D. Azure Site Recovery

Answer: D

Explanation:
Reference:
https://docs.microsoft.com/en-us/azure/site-recovery/site-recovery-test-failover-to-azure

NEW QUESTION 62
- (Exam Topic 5)
You have an Azure SQL database named sqldb1.
You need to minimize the possibility of Query Store transitioning to a read-only state. What should you do?

A. Double the value of Data Flush interval
B. Decrease by half the value of Data Flush Interval
C. Double the value of Statistics Collection Interval
D. Decrease by half the value of Statistics Collection interval

Answer: B

Explanation:
The Max Size (MB) limit isn't strictly enforced. Storage size is checked only when Query Store writes data to disk. This interval is set by the Data Flush Interval (Minutes) option. If Query Store has breached the maximum size limit between storage size checks, it transitions to read-only mode. Reference:
https://docs.microsoft.com/en-us/sql/relational-databases/performance/best-practice-with-the-query-store

NEW QUESTION 66
- (Exam Topic 5)
You have an Azure SQL database named DB1.
You have a table name Table1 that has 20 columns of type CHAR(400). Row compression for Table1 is
enabled.
During a database audit, you discover that none of the fields contain more than 150 characters. You need to ensure that you can apply page compression to Table1.
What should you do?

A. Configure the columns as sparse.
B. Change the column type to nvarchar (MAX).
C. Change the column type to varchar (MAX).
D. Change the column type to varchar (200).

Answer: D

Explanation:
Reference:
https://www.sqlshack.com/sql-varchar-data-type-deep-dive/ https://36chambers.wordpress.com/2020/06/18/nvarchar-everywhere-a-thought-experiment/

NEW QUESTION 69
- (Exam Topic 5)
You have SQL Server on an Azure virtual machine that contains a database named DB1.
You view a plan summary that shows the duration in milliseconds of each execution of query 1178902 as shown in the following exhibit:
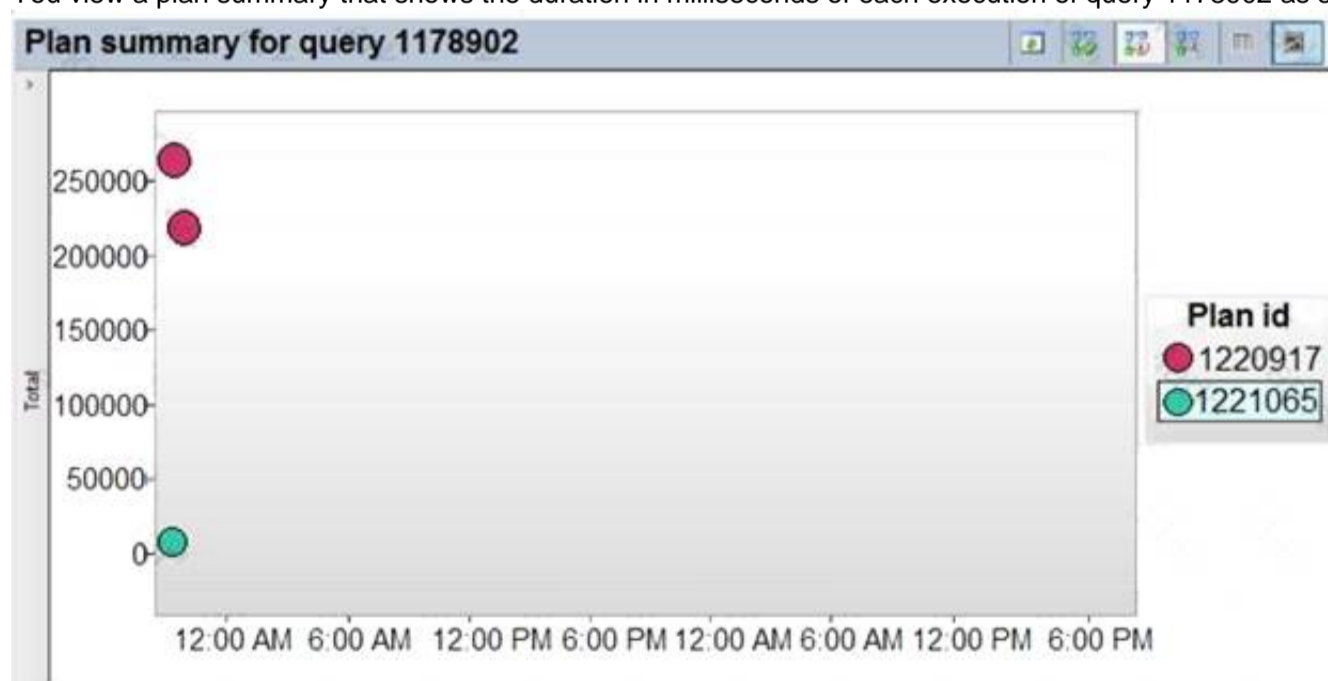
What should you do to ensure that the query uses the execution plan which executes in the least amount of time?

A. Force the query execution plan for plan 1221065.
B. Run the DBCC FREEPROCCACHE command.
C. Force the query execution plan for plan 1220917.
D. Disable parameter sniffing.

Answer: C

Explanation:
Reference:
https://docs.microsoft.com/en-us/sql/relational-databases/performance/query-store-usage-scenarios

NEW QUESTION 74
- (Exam Topic 5)
You have a Microsoft SQL Server database named DB1 that contains a table named Table1. The database role membership for a user named User1 is shown in the following exhibit.
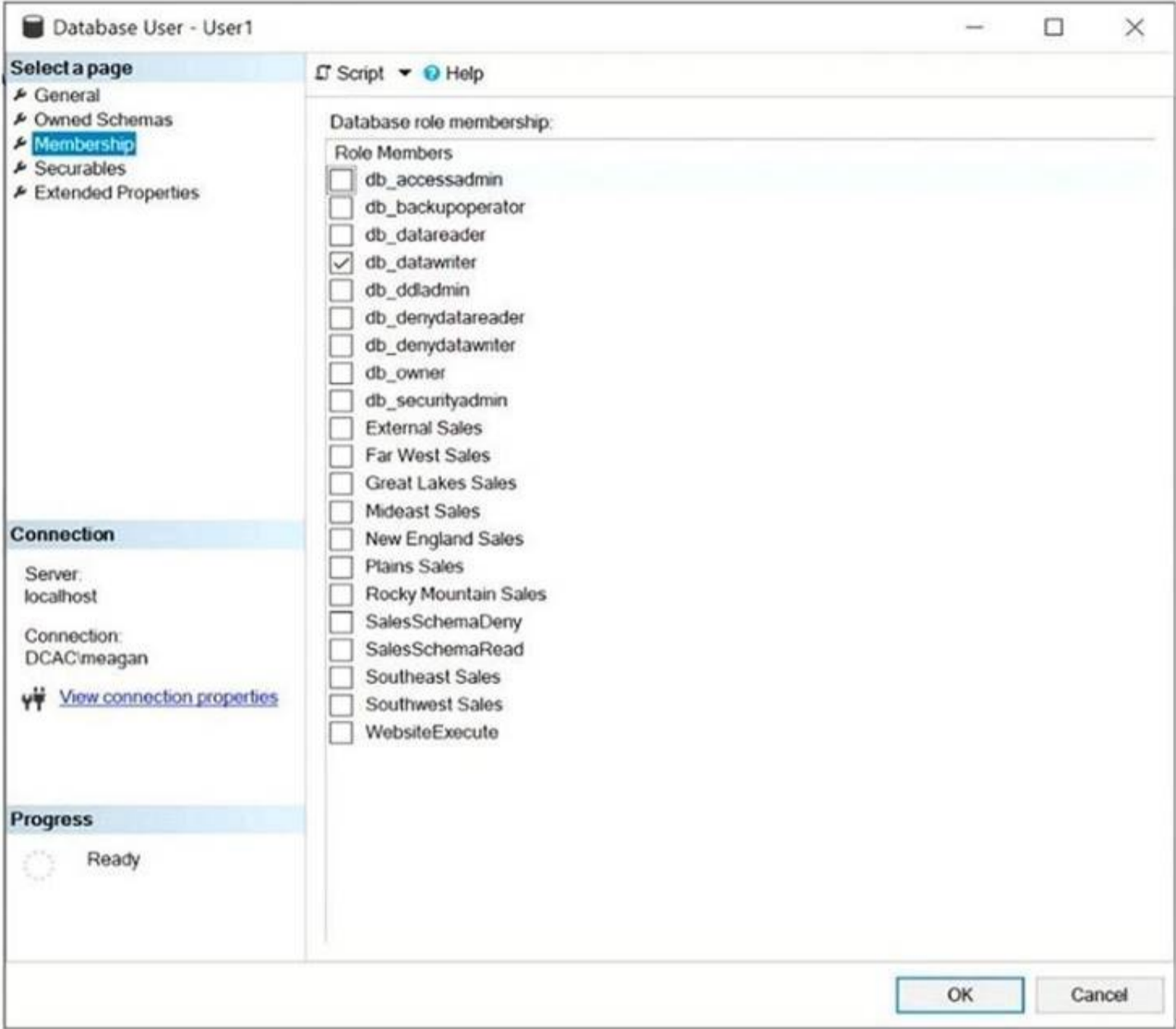
Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic.
NOTE: Each correct selection is worth one point.

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Box 1: delete a row from Table1
Members of the db_datawriter fixed database role can add, delete, or change data in all user tables. Box 2: db_datareader
Members of the db_datareader fixed database role can read all data from all user tables. Reference:
https://docs.microsoft.com/en-us/sql/relational-databases/security/authentication-access/database-level-roles

NEW QUESTION 77
- (Exam Topic 5)
A data engineer creates a table to store employee information for a new application. All employee names are in the US English alphabet. All addresses are locations in the United States. The data engineer uses the following statement to create the table.

```
CREATE TABLE dbo.Employee
(
    EmployeeID      INT IDENTITY(1,1) PRIMARY KEY CLUSTERED NOT NULL,
    FirstName       VARCHAR(100) NOT NULL,
    LastName        VARCHAR(100) NOT NULL,
    Title           VARCHAR(100) NULL,
    LastHireDate    DATETIME NULL,
    StreetAddress1  VARCHAR(500) NOT NULL,
    StreetAddress2  VARCHAR(500) NOT NULL,
    StreetAddress3  VARCHAR(500) NOT NULL,
    City            VARCHAR(200) NOT NULL,
    StateName       VARCHAR(20) NOT NULL,
    Salary          VARCHAR(20) NULL,
    PhoneNumber     VARCHAR(20) NOT NULL
)
```

You need to recommend changes to the data types to reduce storage and improve performance. Which two actions should you recommend? Each correct answer presents part of the solution. NOTE: Each correct selection is worth one point.

A. Change Salary to the money data type.
B. Change PhoneNumber to the float data type.
C. Change LastHireDate to the datetime2(7) data type.
D. Change PhoneNumber to the bigint data type.
E. Change LastHireDate to the date data type.

Answer: AE

NEW QUESTION 78
- (Exam Topic 5)
Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You have an Azure Data Lake Storage account that contains a staging zone.
You need to design a daily process to ingest incremental data from the staging zone, transform the data by executing an R script, and then insert the transformed data into a data warehouse in Azure Synapse Analytics.
Solution: You use an Azure Data Factory schedule trigger to execute a pipeline that executes mapping data flow, and then inserts the data into the data warehouse.
Does this meet the goal?

A. Yes
B. No

Answer: B

Explanation:
If you need to transform data in a way that is not supported by Data Factory, you can create a custom activity, not a mapping flow,5 with your own data processing logic and use the activity in the pipeline. You can create a custom activity to run R scripts on your HDInsight cluster with R installed. Reference:
https://docs.microsoft.com/en-US/azure/data-factory/transform-data

NEW QUESTION 79
- (Exam Topic 5)
You have the following Azure Resource Manager template.

```
...
  "variable": {
    "serverName": "azsqldbserver0001"
  },
  "resources": [
    {
      "name": "[variables('serverName')]",
      "type": "Microsoft.Sql/servers",
      "apiVersion": "2019-06-01-preview",
      "location": "[parameters('location')]",
      "properties": {
        "administratorLogin": "[parameters('administratorLogin')]",
        "administratorLoginPassword": "[parameters('administratorLoginPassword')]",
        "version": "12.0"
      },
      "resources": [
        {
          "name": "[concat(variables('serverName'),'/',parameters('databaseName'))]",
          "type": "Microsoft.Sql/servers/databases",
          "apiVersion": "2020-08-01-preview",
          "location": "[parameters('location')]",
          "kind": "v12.0",
          "sku": {
            "name": "Standard",
            "tier": "Standard",
            "capacity": 10
          },
          "dependsOn": [
           "[concat('Microsoft.Sql/servers/', variables('serverName'))]"
          ],
          "properties": {
          },
          "resources": [
          ]
        }
      ]
    }
  ],
...
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.
NOTE: Each correct selection is worth one point.

Statements	Yes	No
The template deploys a serverless Azure SQL database.	○	○
The template deploys a database to an Azure SQL Database managed instance.	○	○
The pricing tier of the database deployment is based on DTUs.	○	○

A. Mastered
B. Not Mastered

Answer: A

Explanation:
A screenshot of a computer Description automatically generated with low confidence
Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/database/purchasing-models https://docs.microsoft.com/en-us/azure/azure-sql/database/single-database-create-arm-template-quickstart

NEW QUESTION 81
- (Exam Topic 5)
You have an Azure SQL database named DB1. DB1 contains a table that has a column named Col1. You need to encrypt the data in Col1.
Which four actions should you perform for DB1 in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions

Create a database master key.

Create a column master key.

Open the symmetric key. ⬅

Create a certificate. ➡

Update Col1.

Create a symmetric key.

Answer Area

⬆
⬇

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Table Description automatically generated
Reference:
https://www.sqlshack.com/an-overview-of-the-column-level-sql-server-encryption/

NEW QUESTION 83
- (Exam Topic 5)
You have SQL Server 2019 on an Azure virtual machine that contains an SSISDB database. A recent failure causes the master database to be lost.
You discover that all Microsoft SQL Server integration Services (SSIS) packages fail to run on the virtual machine.
Which four actions should you perform in sequence to resolve the issue? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct.

Actions

Add a certificate to an Azure key vault

Enable Transparent Data Encryption (TDE)

Encrypt a copy of the master key by using the service master key ➡

Turn on the TRUSTWORTHY property and the CLR property ⬅

Attach the SSISDB database

Open the master key for the SSISDB database

Answer Area

⬆
⬇

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Step 1: Attach the SSISDB database
Step 2: Turn on the TRUSTWORTHY property and the CLR property
If you are restoring the SSISDB database to an SQL Server instance where the SSISDB catalog was never created, enable common language runtime (clr)
Step 3: Open the master key for the SSISDB database
Restore the master key by this method if you have the original password that was used to create SSISDB. open master key decryption by password = 'LS1Setup!'
--'Password used when creating SSISDB'
Alter Master Key Add encryption by Service Master Key
Step 4: Encrypt a copy of the mater key by using the service master key Reference:
https://docs.microsoft.com/en-us/sql/integration-services/backup-restore-and-move-the-ssis-catalog

NEW QUESTION 87
- (Exam Topic 5)
You have several Azure SQL databases on the same Azure SQL Database server in a resource group named ResourceGroup1.
You must be alerted when CPU usage exceeds 80 percent for any database. The solution must apply to any additional databases that are created on the Azure SQL server.
Which resource type should you use to create the alert?

A. Resource Groups
B. SQL Servers
C. SQL Databases
D. SQL Virtual Machines

Answer: C

Explanation:
There are resource types related to application code, compute infrastructure, networking, storage + databases. You can deploy up to 800 instances of a resource type in each resource group.
Some resources can exist outside of a resource group. These resources are deployed to the subscription, management group, or tenant. Only specific resource types are supported at these scopes.
Reference:
https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/resource-providers-and-types

NEW QUESTION 92
- (Exam Topic 5)
You are designing a dimension table in an Azure Synapse Analytics dedicated SQL pool.
You need to create a surrogate key for the table. The solution must provide the fastest query performance. What should you use for the surrogate key?

A. an IDENTITY column
B. a GUID column
C. a sequence object

Answer: A

Explanation:
Dedicated SQL pool supports many, but not all, of the table features offered by other databases. Surrogate keys are not supported. Implement it with an Identity column.
Reference:
https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-tablesovervie

NEW QUESTION 94
- (Exam Topic 5)
You have a new Azure SQL database named DB1 on an Azure SQL server named AzSQL1. The only user who was created is the server administrator.
You need to create a contained database user in DB1 who will use Azure Active Directory (Azure AD) for authentication.
Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Step 1: Set up the Active Directory Admin for AzSQL1. Step 2: Connect to DB1 by using the server administrator.
Sign into your managed instance with an Azure AD login granted with the sysadmin role. Step 3: Create a user by using the FROM EXTERNAL PROVIDER clause.
FROM EXTERNAL PROVIDER is available for creating server-level Azure AD logins in SQL Database managed instance. Azure AD logins allow database-level

Azure AD principals to be mapped to server-level Azure AD logins. To create an Azure AD user from an Azure AD login use the following syntax:
CREATE USER [AAD_principal] FROM LOGIN [Azure AD login] Reference:
https://docs.microsoft.com/en-us/sql/t-sql/statements/create-user-transact-sql

NEW QUESTION 99
- (Exam Topic 5)
You have a new Azure subscription.
You create an Azure SQL Database instance named DB1 on an Azure SQL Database server named Server1. You need to ensure that users can connect to DB1 in the event of an Azure regional outage. In the event of an outage, applications that connect to DB1 must be able to connect without having to update the connection
strings.
Which two actions should you perform? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A. From the properties of DB1. configure geo-replication.
B. From the properties of Server1 add a failover group.
C. Create a new Azure SQL Database server named Server2.
D. From the properties of Server1 configure retention for DB1
E. Create a new Azure SQL Database instance named DB2.

Answer: BC

Explanation:
Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/database/auto-failover-group-overview?tabs=azure-powershell https://docs.microsoft.com/en-us/azure/azure-sql/database/failover-group-add-single-database-tutorial?tabs=azur

NEW QUESTION 102
- (Exam Topic 5)
You have an Azure Active Directory (Azure AD) tenant named contoso.com that contains a user named user1@contoso.com and an Azure SQL managed instance named SQLMI1.
You need to ensure that user1@contoso.com can create logins in SQLMI1 that map to Azure AD service principals.
Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions	Answer Area
Run CREATE LOGIN user1@contoso.com FROM EXTERNAL PROVIDER on the master database.	
Run ALTER SERVER ROLE securityadmin ADD MEMBER user1@contoso.com.	
Create a managed identity for SQLMI1.	
Grant SQLMI1 read access to Azure AD.	
Run CREATE USER user1@contoso.com FROM LOGIN user1@contoso.com.	

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Text Description automatically generated with medium confidence
Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/managed-instance/aad-security-configure-tutorial

NEW QUESTION 105
- (Exam Topic 5)
You have an Azure SQL database.
You run the following PowerShell script.

```
$serverName = "SERVER1"
$resourceGroup = "RG1"
$dbName = "DB1"

Connect-AzAccount

$server = Get-AzSqlServer -ServerName $serverName -ResourceGroupName
$resourceGroup

Set-AzSqlDatabaseBackupShortTermRetentionPolicy -ResourceGroupName $resourceGroup
-ServerName $server '
     -DatabaseName $dbName -RetentionDays 21

Set-AzSqlDatabaseBackupLongTermRetentionPolicy -ServerName $serverName -
DatabaseName $dbName '
     -ResourceGroupName $resourceGroup -WeeklyRetention P52W -YearlyRetention PSY
-WeekOfYear 52
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.
NOTE: Each correct selection is worth one point.

Statements	Yes	No
DB1 can be restored to a specific point in time 30 days ago.	○	○
DB1 can be restored from a weekly backup performed six months ago.	○	○
DB1 can be restored from a yearly backup performed six years ago.	○	○

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Text Description automatically generated
Reference:
https://docs.microsoft.com/en-us/powershell/module/az.sql/set-azsqldatabasebackupshorttermretentionpolicy?vi
https://docs.microsoft.com/en-us/powershell/module/az.sql/set-azsqldatabasebackuplongtermretentionpolicy?vie

NEW QUESTION 109
- (Exam Topic 5)
You have SQL Server on an Azure virtual machine.
You need to add a 4-TB volume that meets the following requirements:
➢ Maximizes IOPs
➢ Uses premium solid state drives (SSDs)
What should you do?

A. Attach two mirrored 4-TB SSDs.
B. Attach a stripe set that contains four 1-TB SSDs.
C. Attach a RAID-5 array that contains five 1-TB SSDs.
D. Attach a single 4-TB SSD.

Answer: B

Explanation:
Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/virtual-machines/windows/storage-configuration?tabs=window

NEW QUESTION 113
- (Exam Topic 5)
You have an Azure Data Factory instance named ADF1 and two Azure Synapse Analytics workspaces named WS1 and WS2.
ADF1 contains the following pipelines:
➢ P1:Uses a copy activity to copy data from a nonpartitioned table in a dedicated SQL pool of WS1 to an Azure Data Lake Storage Gen2 account

> P2:Uses a copy activity to copy data from text-delimited files in an Azure Data Lake Storage Gen2 account to a nonpartitioned table in a dedicated SQL pool of WS2

You need to configure P1 and P2 to maximize parallelism and performance.

Which dataset settings should you configure for the copy activity of each pipeline? To answer, select the appropriate options in the answer area.

P1:
Set the Copy method to Bulk insert.
Set the Copy method to PolyBase.
Set the Isolation level to Repeatable read.
Set the Partition option to Dynamic range.

P2:
Set the Copy method to Bulk insert.
Set the Copy method to PolyBase.
Set the Isolation level to Repeatable read.
Set the Partition option to Dynamic range.

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Graphical user interface, text, chat or text message Description automatically generated
P1: Set the Partition option to Dynamic Range.
The SQL Server connector in copy activity provides built-in data partitioning to copy data in parallel. P2: Set the Copy method to PolyBase
Polybase is the most efficient way to move data into Azure Synapse Analytics. Use the staging blob feature to achieve high load speeds from all types of data stores, including Azure Blob storage and Data Lake Store. (Polybase supports Azure Blob storage and Azure Data Lake Store by default.)
Reference:
https://docs.microsoft.com/en-us/azure/data-factory/connector-azure-sql-data-warehouse https://docs.microsoft.com/en-us/azure/data-factory/load-azure-sql-data-warehouse

NEW QUESTION 117
- (Exam Topic 5)
You need to recommend an availability strategy for an Azure SQL database. The strategy must meet the following requirements:

> Support failovers that do not require client applications to change their connection strings.

> Replicate the database to a secondary Azure region.

> Support failover to the secondary region. What should you include in the recommendation?

A. failover groups
B. transactional replication
C. Availability Zones
D. geo-replication

Answer: A

Explanation:
Active geo-replication is an Azure SQL Database feature that allows you to create readable secondary databases of individual databases on a server in the same or different data center (region).
Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/database/active-geo-replication-overview

NEW QUESTION 118
- (Exam Topic 5)
You are designing an enterprise data warehouse in Azure Synapse Analytics that will contain a table named Customers. Customers will contain credit card information.
You need to recommend a solution to provide salespeople with the ability to view all the entries in Customers. The solution must prevent all the salespeople from viewing or inferring the credit card information.
What should you include in the recommendation?

A. row-level security
B. data masking
C. Always Encrypted
D. column-level security

Answer: B

Explanation:
Azure SQL Database, Azure SQL Managed Instance, and Azure Synapse Analytics support dynamic data masking. Dynamic data masking limits sensitive data exposure by masking it to non-privileged users.
The Credit card masking method exposes the last four digits of the designated fields and adds a constant string as a prefix in the form of a credit card.
Example:
XXXX-XXXX-XXXX-1234

NEW QUESTION 120
- (Exam Topic 5)
You have SQL Server on an Azure virtual machine.
You need to use Policy-Based Management in Microsoft SQL Server to identify stored procedures that do not comply with your naming conventions.
Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions		Answer Area
Export a built-in policy.		
Create a custom policy based on a condition.		
Create a custom condition based on a built-in facet.	◀	⌃
View the policy history.	▶	⌄
Import a policy file.		
Run a policy evaluation.		

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Text Description automatically generated
Reference:
https://www.mssqltips.com/sqlservertip/2298/enforce-sql-server-database-naming-conventions-using-policy-bas

NEW QUESTION 122
- (Exam Topic 5)
You plan to move two 100-GB databases to Azure.
You need to dynamically scale resources consumption based on workloads. The solution must minimize downtime during scaling operations.
What should you use?

A. An Azure SQL Database elastic pool
B. SQL Server on Azure virtual machines
C. an Azure SQL Database managed instance
D. Azure SQL databases

Answer: A

Explanation:
Azure SQL Database elastic pools are a simple, cost-effective solution for managing and scaling multiple databases that have varying and unpredictable usage demands. The databases in an elastic pool are on a single server and share a set number of resources at a set price.
Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/database/elastic-pool-overview

NEW QUESTION 126
- (Exam Topic 5)
Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You have SQL Server 2019 on an Azure virtual machine.
You are troubleshooting performance issues for a query in a SQL Server instance.
To gather more information, you query sys.dm_exec_requests and discover that the wait type is PAGELATCH_UP and the wait_resource is 2:3:905856.
You need to improve system performance.
Solution: You change the data file for the master database to autogrow by 10 percent. Does this meet the goal?

A. Yes
B. No

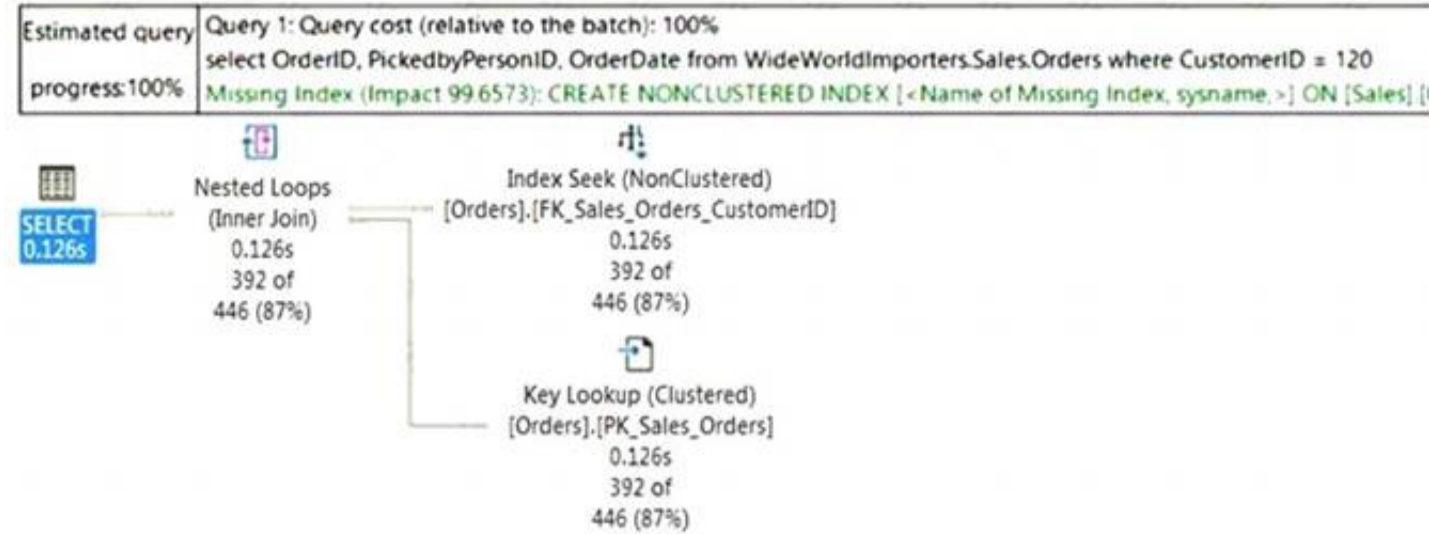**Answer:** B

Explanation:
Reference:
https://docs.microsoft.com/en-US/troubleshoot/sql/performance/recommendations-reduce-allocation-contention

NEW QUESTION 130

- (Exam Topic 5)
You have an Azure SQL database.
You are reviewing a slow performing query as shown in the following exhibit.

Estimated query progress:100%	Query 1: Query cost (relative to the batch): 100%
	select OrderID, PickedbyPersonID, OrderDate from WideWorldImporters.Sales.Orders where CustomerID = 120
	Missing Index (Impact 99.6573): CREATE NONCLUSTERED INDEX [<Name of Missing Index, sysname, >] ON [Sales].[

SELECT
0.126s

Nested Loops
(Inner Join)
0.126s
392 of
446 (87%)

Index Seek (NonClustered)
[Orders].[FK_Sales_Orders_CustomerID]
0.126s
392 of
446 (87%)

Key Lookup (Clustered)
[Orders].[PK_Sales_Orders]
0.126s
392 of
446 (87%)

Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic.
NOTE: Each correct selection is worth one point.

The exhibit shows [answer choice]

an actual execution plan
an estimated execution plan
Live Query Statistics

The [answer choice] operator in the execution plan indicates that the query would benefit from performance tuning.

Index Seek
Key Lookup
Nested Loops

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Graphical user interface, text, application, email Description automatically generated
Reference:
https://docs.microsoft.com/en-us/sql/relational-databases/performance/live-query-statistics?view=sql-server-ver

NEW QUESTION 133
- (Exam Topic 5)
You have an on-premises Microsoft SQL server that uses the FileTables and Filestream features. You plan to migrate to Azure SQL.
Which service should you use?

A. Azure SQL Database
B. SQL Server on an Azure Virtual Machine
C. Azure SQL Managed Instance
D. Azure Database for MySQL

Answer: B

Explanation:
Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/migration-guides/database/sql-server-to-sql-database-overview

NEW QUESTION 136
- (Exam Topic 5)
You are planning disaster recovery for the failover group of an Azure SQL Database managed instance.
Your company's SLA requires that the database in the failover group become available as quickly as possible if a major outage occurs.
You set the Read/Write failover policy to Automatic.
What are two results of the configuration? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A. In the event of a datacenter or Azure regional outage, the databases will fail over automatically.
B. In the event of an outage, the databases in the primary instance will fail over immediately.
C. In the event of an outage, you can selectively fail over individual databases.
D. In the event of an outage, you can set a different grace period to fail over each database.
E. In the event of an outage, the minimum delay for the databases to fail over in the primary instance will be one hour.

Answer: AE

Explanation:
A: Auto-failover groups allow you to manage replication and failover of a group of databases on a server or all databases in a managed instance to another region.
E: Because verification of the scale of the outage and how quickly it can be mitigated involves human actions by the operations team, the grace period cannot be set below one hour. This limitation applies to all databases in the failover group regardless of their data synchronization state.
Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/database/auto-failover-group-overview

NEW QUESTION 141
- (Exam Topic 5)
Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You have two Azure SQL Database servers named Server1 and Server2. Each server contains an Azure SQL database named Database1.
You need to restore Database1 from Server1 to Server2. The solution must replace the existing Database1 on Server2.
Solution: You run the Remove-AzSqlDatabase PowerShell cmdlet for Database1 on Server2. You run the Restore-AzSqlDatabase PowerShell cmdlet for Database1 on Server2.
Does this meet the goal?

A. Yes
B. No

Answer: B

Explanation:
Instead restore Database1 from Server1 to the Server2 by using the RESTORE Transact-SQL command and the REPLACE option.
Note: REPLACE should be used rarely and only after careful consideration. Restore normally prevents accidentally overwriting a database with a different database. If the database specified in a RESTORE statement already exists on the current server and the specified database family GUID differs from the database family GUID recorded in the backup set, the database is not restored. This is an important safeguard.
Reference:
https://docs.microsoft.com/en-us/sql/t-sql/statements/restore-statements-transact-sql

NEW QUESTION 144
- (Exam Topic 5)
You have an on-premises app named App1 that stores data in an on-premises Microsoft SQL Server 2016 database named DB1.
You plan to deploy additional instances of App1 to separate Azure regions. Each region will have a separate instance of App1 and DB1. The separate instances of DB1 will sync by using Azure SQL Data Sync.
You need to recommend a database service for the deployment. The solution must minimize administrative effort.
What should you include in the recommendation?

A. Azure SQL Managed instance
B. Azure SQL Database single database
C. Azure Database for PostgreSQL
D. SQL Server on Azure virtual machines

Answer: B

Explanation:
Azure SQL Database single database supports Data Sync. Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/database/features-comparison

NEW QUESTION 146
- (Exam Topic 5)
You have an Azure SQL database.
Users report that the executions of a stored procedure are slower than usual. You suspect that a regressed query is causing the performance issue.
You need to view the query execution plan to verify whether a regressed query is causing the issue. The solution must minimize effort.
What should you use?

A. Performance Recommendations in the Azure portal
B. Extended Events in Microsoft SQL Server Management Studio (SSMS)
C. Query Store in Microsoft SQL Server Management Studio (SSMS)
D. Query Performance Insight in the Azure portal

Answer: C

Explanation:
Use the Query Store Page in SQL Server Management Studio.
Query performance regressions caused by execution plan changes can be non-trivial and time consuming to resolve.
Since the Query Store retains multiple execution plans per query, it can enforce policies to direct the Query Processor to use a specific execution plan for a query. This is referred to as plan forcing. Plan forcing in Query Store is provided by using a mechanism similar to the USE PLAN query hint, but it does not require any change in user applications. Plan forcing can resolve a query performance regression caused by a plan change in a very short period of time.
Reference:
https://docs.microsoft.com/en-us/sql/relational-databases/performance/monitoring-performance-by-using-the-qu

NEW QUESTION 151
- (Exam Topic 5)
You are designing an anomaly detection solution for streaming data from an Azure IoT hub. The solution must meet the following requirements:

➢ Send the output to an Azure Synapse.

➢ Identify spikes and dips in time series data.

> Minimize development and configuration effort. Which should you include in the solution?

A. Azure SQL Database
B. Azure Databricks
C. Azure Stream Analytics

Answer: C

Explanation:
Anomalies can be identified by routing data via IoT Hub to a built-in ML model in Azure Stream Analytics Reference:
https://docs.microsoft.com/en-us/learn/modules/data-anomaly-detection-using-azure-iot-hub/ https://docs.microsoft.com/en-us/azure/stream-analytics/azure-synapse-analytics-output

NEW QUESTION 155
- (Exam Topic 5)
You have a on-premises Microsoft SQL Server named SQL1 that hosts five databases.
You need to migrate the databases to an Azure SQL managed instance. The solution must minimize downtime and prevent data loss.
What should you use?

A. log shipping
B. Always On availability groups
C. Database Migration Assistant
D. Backup and Restore

Answer: A

NEW QUESTION 159
- (Exam Topic 5)
You have a Microsoft SQL Server 2019 instance in an on-premises datacenter. The instance contains a 4-TB database named DB1.
You plan to migrate DB1 to an Azure SQL Database managed instance.
What should you use to minimize downtime and data loss during the migration?

A. distributed availability groups
B. database mirroring
C. log shipping
D. Database Migration Assistant

Answer: D

Explanation:
Ref: https://docs.microsoft.com/en-us/azure/dms/tutorial-sql-server-to-azure-sql

NEW QUESTION 161
- (Exam Topic 5)
You have an Azure SQL managed instance.
You need to enable SQL Agent Job email notifications. What should you do?

A. Use the Agent XPs option.
B. Enable the SQL Server Agent.
C. Run the sp_configure command.
D. Run the sp set_agent properties command.

Answer: C

NEW QUESTION 163
- (Exam Topic 5)
You have an instance of SQL Server on Azure Virtual Machine named SQL1.
You need to monitor SQL1 and query the metrics by using Kusto query language. The solution must minimize administrative effort.
Where should you store the metrics?

A. a Log Analytics workspace
B. Azure Event Hubs
C. Azure SQL Database
D. an Azure Blob storage container

Answer: A

NEW QUESTION 166
- (Exam Topic 5)
You are creating a new notebook in Azure Databricks that will support R as the primary language but will also support Scala and SQL.
Which switch should you use to switch between languages?

A. \\[<language>]
B. %<language>
C. \\[<language>]
D. @<language>

Answer: B

Explanation:

You can override the default language by specifying the language magic command %<language> at the beginning of a cell. The supported magic commands are:
%python, %r, %scala, and %sql.
Reference:
https://docs.microsoft.com/en-us/azure/databricks/notebooks/notebooks-use

NEW QUESTION 170
- (Exam Topic 5)
You have an Azure Data Factory that contains 10 pipelines.
You need to label each pipeline with its main purpose of either ingest, transform, or load. The labels must be available for grouping and filtering when using the monitoring experience in Data Factory.
What should you add to each pipeline?

A. an annotation
B. a resource tag
C. a run group ID
D. a user property
E. a correlation ID

Answer: A

Explanation:
Azure Data Factory annotations help you easily filter different Azure Data Factory objects based on a tag. You can define tags so you can see their performance or find errors faster.
Reference:
https://www.techtalkcorner.com/monitor-azure-data-factory-annotations/

NEW QUESTION 174
- (Exam Topic 5)
You have the following Azure Data Factory pipelines:

≫ Ingest Data from System1

≫ Ingest Data from System2

≫ Populate Dimensions

≫ Populate Facts

Ingest Data from System1 and Ingest Data from System2 have no dependencies. Populate Dimensions must execute after Ingest Data from System1 and Ingest Data from System2. Populate Facts must execute after the Populate Dimensions pipeline. All the pipelines must execute every eight hours.
What should you do to schedule the pipelines for execution?

A. Add a schedule trigger to all four pipelines.
B. Add an event trigger to all four pipelines.
C. Create a parent pipeline that contains the four pipelines and use an event trigger.
D. Create a parent pipeline that contains the four pipelines and use a schedule trigger.

Answer: D

Explanation:
Reference:
https://www.mssqltips.com/sqlservertip/6137/azure-data-factory-control-flow-activities-overview/

NEW QUESTION 177
- (Exam Topic 5)
You have an Azure subscription that contains an Azure SQL database named SQL1. SQL1 is in an Azure region that does not support availability zones.
You need to ensure that you have a secondary replica of SQLI in the same region. What should you use?

A. log shipping
B. auto-failover groups
C. active geo-replication
D. Microsoft SQL Server failover clusters

Answer: C

NEW QUESTION 179
- (Exam Topic 5)
Your on-premises network contains a Microsoft SQL Server 2016 server that hosts a database named db1. You have an Azure subscription.
You plan to migrate db1 to an Azure SQL managed instance.
You need to create the SQL managed instance. The solution must minimize the disk latency of the instance. Which service tier should you use?

A. Hyperscale
B. General Purpose
C. Premium
D. Business Critical

Answer: A

NEW QUESTION 184
- (Exam Topic 5)
You have an Azure SQL Database managed instance. The instance starts experiencing performance issues.
You need to identify which query is causing the issue and retrieve the execution plan for the query. The solution must minimize administrative effort.
What should you use?

A. the Azure portal
B. Extended Events
C. Query Store
D. dynamic management views

Answer: C

Explanation:
Reference:
https://docs.microsoft.com/en-us/sql/relational-databases/performance/monitoring-performance-by-using-the-qu

NEW QUESTION 187
- (Exam Topic 5)
Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You have SQL Server 2019 on an Azure virtual machine.
You are troubleshooting performance issues for a query in a SQL Server instance.
To gather more information, you query sys.dm_exec_requests and discover that the wait type is PAGELATCH_UP and the wait_resource is 2:3:905856.
You need to improve system performance. Solution: You create additional tempdb files. Does this meet the goal?

A. Yes
B. No

Answer: A

Explanation:
Reference:
https://docs.microsoft.com/en-US/troubleshoot/sql/performance/recommendations-reduce-allocation-contention

NEW QUESTION 192
- (Exam Topic 5)
You have an Azure SQL managed instance named SQL1 and two Azure web apps named App1 and App2. You need to limit the number of IOPs that App2 queries generate on SQL1.
Which two actions should you perform on SQL1? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A. Enable query optimizer fixes.
B. Enable Resource Governor.
C. Enable parameter sniffing.
D. Create a workload group.
E. Configure In-memory OLTP.
F. Run the Database Engine Tuning Advisor.
G. Reduce the Max Degree of Parallelism value.

Answer: BC

Explanation:
Reference:
https://docs.microsoft.com/en-us/sql/relational-databases/resource-governor/resource-governor?view=sql-server

NEW QUESTION 196
- (Exam Topic 5)
Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You have an Azure Data Lake Storage account that contains a staging zone.
You need to design a daily process to ingest incremental data from the staging zone, transform the data by executing an R script, and then insert the transformed data into a data warehouse in Azure Synapse Analytics.
Solution: You schedule an Azure Databricks job that executes an R notebook, and then inserts the data into the data warehouse.
Does this meet the goal?

A. Yes
B. No

Answer: B

Explanation:
Must use an Azure Data Factory, not an Azure Databricks job. Reference:
https://docs.microsoft.com/en-US/azure/data-factory/transform-data

NEW QUESTION 197
- (Exam Topic 5) You have an Azure SQL database. You identify a long running query.

You need to identify which operation in the query is causing the performance issue.
What should you use to display the query execution plan in Microsoft SQL Server Management Studio (SSMS)?

A. Live Query Statistics
B. an estimated execution plan
C. an actual execution plan
D. Client Statistics

Answer: C

Explanation:
To include an execution plan for a query during execution
* 1. On the SQL Server Management Studio toolbar, click Database Engine Query. You can also open an
existing query and display the estimated execution plan by clicking the Open File toolbar button and locating the existing query.
* 2. Enter the query for which you would like to display the actual execution plan.
* 3. On the Query menu, click Include Actual Execution Plan or click the Include Actual Execution Plan toolbar button.
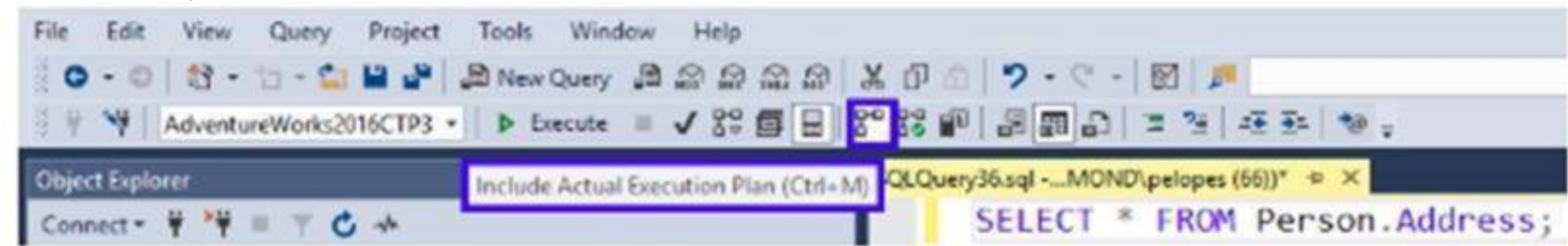
Note: Actual execution plans are generated after the Transact-SQL queries or batches execute. Because of this, an actual execution plan contains runtime information, such as actual resource usage metrics and runtime warnings (if any). The execution plan that is generated displays the actual query execution plan that the SQL Server Database Engine used to execute the queries.
Reference:
https://docs.microsoft.com/en-us/sql/relational-databases/performance/display-an-actual-execution-plan

NEW QUESTION 199
- (Exam Topic 5)
You have an Azure subscription that contains the resources shown in the following table.

Name	Type	Description
SQL1	SQL Server on Azure Virtual Machines	Not applicable
db1	Microsoft SQL Server database	Hosted on SQL1
mysqlbackups	General purpose v2 storage account	Not applicable

You need to back up db1 to mysqlbackups, and then restore the backup to a new database named db2 that is hosted on SQL1. The solution must ensure that db1 is backed up to a stripe set.
Which three Transact-SQL statements should you execute in sequence? To answer, move the appropriate statements from the list of statements to the answer area and arrange them in the correct order.

Statements

Answer Area

```
RESTORE DATABASE db2 FROM URL = URL =
'https://mysqlbackups.blob.core.windows.net
/backups/db1_1.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net
/backups/db1_2.bak'
,URL =
'https://mysqlbackups.blob.core.windows.net
/backups/db1_3.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net
/backups/db1_4.bak'
WITH CREDENTIAL = 'sqlbackup', RECOVERY,
        MOVE 'db1_mdf' TO
'D:\Data\db2_mdf.mdf',
        MOVE 'db1_log' TO
'D:\Logs\db2_log.ldf'
```

```
BACKUP DATABASE db1
TO URL =
'https://mysqlbackups.blob.core.windows.net
/backups/db1_1.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net
/backups/db1_2.bak'
,URL =
'https://mysqlbackups.blob.core.windows.net
/backups/db1_3.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net
/backups/db1_4.bak'
WITH CREDENTIAL = 'sqlbackup';
GO
```

```
RESTORE DATABASE db2 FROM URL =
'https://mysqlbackups.blob.core.windows.net
/backups/db1_1.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net
/backups/db1_2.bak'
,URL =
'https://mysqlbackups.blob.core.windows.net
/backups/db1_3.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net
/backups/db1_4.bak'
WITH RECOVERY,
        MOVE 'db1_mdf' TO
'D:\Data\db2_mdf.mdf',
        MOVE 'db1_log' TO
'D:\Logs\db2_log.ldf'
```

```
CREATE CREDENTIAL
[https://mysqlbackups.blob.core.windows.net
/backups]
WITH IDENTITY = 'SHARED ACCESS SIGNATURE',
SECRET = '<SAS_TOKEN>'
GO
```

```
BACKUP DATABASE db1
TO URL =
'https://mysqlbackups.blob.core.windows.net
/backups/db1_1.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net
/backups/db1_2.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net
/backups/db1_3.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net
/backups/db1_4.bak'

GO
```

```
CREATE CREDENTIAL [sqlbackup] WITH IDENTITY
=
'sqlsamplebackup'
,SECRET = '<mystorageaccountaccesskey>';
GO
```

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Text Description automatically generated with low confidence
Text Description automatically generated
Reference:
https://docs.microsoft.com/en-us/sql/relational-databases/backup-restore/sql-server-backup-to-url?view=sql-serv

NEW QUESTION 203
- (Exam Topic 5)
You have an Azure subscription.

You need to deploy an Azure SQL resource that will support cross database queries by using an Azure Resource Manager (ARM) template.
How should you complete the ARM template? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

Answer Area

```
"resources": [
    ...
    "type":        [ ▼                        ]
                    Microsoft.Sql/servers
                    Microsoft.Sql/servers/databases
                    Microsoft.Sql/managedInstances

    "name": "[parameters('targetName')]",
    "location": "[parameters('location')]",
    "sku": {
     "name": "[parameters('skuName')]"
    ...
    "dependsOn": [
                   [ ▼                        ]
                    "[parameters('targetName')]",
                    "[parameters('virtualNetworkName')]"
                    "[variables('networkSecurityGroupName')]",
    ],
    "properties": {
     "administratorLogin": "[parameters('administratorLogin')]",
     "administratorLoginPassword": "[parameters('administratorLoginPassword')]",
     "subnetId": "[resourceId('Microsoft.Network/virtualNetworks/subnets', parameters('virtualNetworkName'),
      parameters('virtualNetworkName'), parameters('subnetName'))]",
     "storageSizeInGB": "[parameters('storageSizeInGB')]","vCores": "[parameters('vCores')]",
     "licenseType": "[parameters('licenseType')]"
    ...
   ]
```

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Graphical user interface, text, application, Word, email Description automatically generated
Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/managed-instance/create-template-quickstart?tabs=azure-powe

NEW QUESTION 204
- (Exam Topic 5)
You have an Azure virtual machine named VM1 on a virtual network named VNet1. Outbound traffic from VM1 to the internet is blocked.
You have an Azure SQL database named SqlDb1 on a logical server named SqlSrv1.
You need to implement connectivity between VM1 and SqlDb1 to meet the following requirements:
≫ Restrict network connectivity to SqlSrv1.
What should you create on VNet1?

A. a VPN gateway
B. a service endpoint
C. a private endpoint
D. an ExpressRoute gateway

Answer: C

Explanation:
A private endpoint is a network interface that uses a private IP address from your virtual network. This network interface connects you privately and securely to a service powered by Azure Private Link. By enabling a private endpoint, you're bringing the service into your virtual network.
The service could be an Azure service such as:
≫ Azure Storage
≫ Azure Cosmos DB
≫ Azure SQL Database
≫ Your own service using a Private Link Service. Reference:
https://docs.microsoft.com/en-us/azure/private-link/private-endpoint-overview

NEW QUESTION 207
- (Exam Topic 5)
You have a resource group named App1Dev that contains an Azure SQL Database server named DevServer1. DevServer1 contains an Azure SQL database named DB1. The schema and permissions for DB1 are saved in a Microsoft SQL Server Data Tools (SSDT) database project.
You need to populate a new resource group named App1Test with the DB1 database and an Azure SQL Server named TestServer1. The resources in App1Test must have the same configurations as the resources in App1Dev.

Which four actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions

| Change the Active Directory Admin on TestServer1 |
| Change the server name and related variables in the templates |
| From the database project, deploy the database schema and permissions |
| Add IP addresses to the firewall |
| From the Azure portal, export the Azure Resource Manager templates |
| From the Azure portal, deploy the templates. |

Answer Area

A. Mastered
B. Not Mastered

Answer: A

Explanation:

Actions

| Change the Active Directory Admin on TestServer1 |
| Change the server name and related variables in the templates |
| From the database project, deploy the database schema and permissions |
| Add IP addresses to the firewall |
| From the Azure portal, export the Azure Resource Manager templates |
| From the Azure portal, deploy the templates. |

Answer Area

| From the Azure portal, export the Azure Resource Manager templates |
| Change the server name and related variables in the templates |
| From the Azure portal, deploy the templates. |
| From the database project, deploy the database schema and permissions |

NEW QUESTION 212
- (Exam Topic 5)
You have an Azure SQL database named DB1 that contains a private certificate named Sales. The private key for Sales is encrypted with a password. You need to change the password for the private key. Which
Transact-SQL statement should you run?
A)
```
ALTER CERTIFICATE Sales
    WITH PRIVATE KEY (DECRYPTION BY PASSWORD = 'Mb^6BK&*w%',
    ENCRYPTION BY PASSWORD = ' 6YY9YcD!pV');
```
B)
```
ALTER CERTIFICATE Sales
    WITH PRIVATE KEY (ENCRYPTION BY PASSWORD = ' 6YY9YcD!pV');
```
C)
```
ALTER CERTIFICATE Sales    WITH PRIVATE KEY (FILE = 'D:\importkeys\SalesNew,    DECRYPTION BY PASSWORD = ' Mb^6BK&*w%');
```
D)
```
ALTER CERTIFICATE Sales    WITH PRIVATE KEY (DECRYPTION BY PASSWORD = ' EWYx9Xk+$#');
```

A. Option A
B. Option B
C. Option C
D. Option D

Answer: C

NEW QUESTION 216
- (Exam Topic 5)
You are building an Azure Stream Analytics job to retrieve game data.
You need to ensure that the job returns the highest scoring record for each five-minute time interval of each game.
How should you complete the Stream Analytics query? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

```
SELECT [                          ▼] as HighestScore
        Collect(Score)
        CollectTop(1)OVER(ORDER BY Score Desc)
        Game, MAX(Score)
        TopOne() OVER(PARTITION BY Game ORDER BY Score Desc)

FROM input TIMESTAMP BY CreatedAt

GROUP BY [                          ▼]
         Game
         Hopping(minute, 5)
         Tumbling(minute, 5)
         Windows(TumblingWindow(minute, 5), Hopping(minute, 5))
```

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Graphical user interface, text, application, email Description automatically generated
Box 1: TopOne() OVER(PARTITION BY Game ORDER BY Score Desc)
TopOne returns the top-rank record, where rank defines the ranking position of the event in the window according to the specified ordering. Ordering/ranking is based on event columns and can be specified in ORDER BY clause.
Analytic Function Syntax:
TopOne() OVER ([<PARTITION BY clause>] ORDER BY (<column name> [ASC |DESC])+ <LIMIT
DURATION clause> [<WHEN clause>])
Box 2: Tumbling(minute 5)
Tumbling window functions are used to segment a data stream into distinct time segments and perform a function against them, such as the example below. The key differentiators of a Tumbling window are that they repeat, do not overlap, and an event cannot belong to more than one tumbling window.


```
SELECT TimeZone, COUNT(*) AS Count
FROM TwitterStream TIMESTAMP BY CreatedAt
GROUP BY TimeZone, TumblingWindow(second,10)
```

Reference:
https://docs.microsoft.com/en-us/stream-analytics-query/topone-azure-stream-analytics https://github.com/MicrosoftDocs/azure-docs/blob/master/articles/stream-analytics/stream-analytics-window-fun
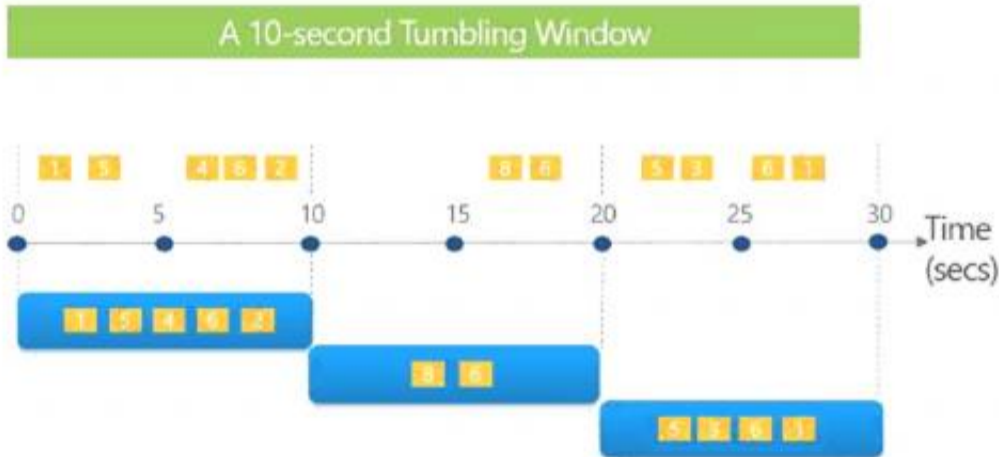
NEW QUESTION 220
- (Exam Topic 5)

You have an Azure SQL database named DB1.
You need to ensure that DB1 will support automatic failover without data loss if a datacenter fails. The solution must minimize costs.
Which deployment option and pricing tier should you configure?

A. Azure SQL Database Premium
B. Azure SQL Database serverless
C. Azure SQL Database managed instance Business Critical
D. Azure SQL Database Standard

Answer: A

Explanation:
By default, the cluster of nodes for the premium availability model is created in the same datacenter. With the introduction of Azure Availability Zones, SQL Database can place different replicas of the Business Critical database to different availability zones in the same region. To eliminate a single point of failure, the control ring is also duplicated across multiple zones as three gateway rings (GW). The routing to a specific gateway ring is controlled by Azure Traffic Manager (ATM). Because the zone redundant configuration in the Premium or Business Critical service tiers does not create additional database redundancy, you can enable it at no extra cost. By selecting a zone redundant configuration, you can make your Premium or Business Critical databases resilient to a much larger set of failures, including catastrophic datacenter outages, without any changes to the application logic. You can also convert any existing Premium or Business Critical databases or pools to the zone redundant configuration.
Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla

NEW QUESTION 221
- (Exam Topic 5)
You have an Azure Data Factory pipeline that performs an incremental load of source data to an Azure Data Lake Storage Gen2 account.
Data to be loaded is identified by a column named LastUpdatedDate in the source table. You plan to execute the pipeline every four hours.
You need to ensure that the pipeline execution meets the following requirements:
Automatically retries the execution when the pipeline run fails due to concurrency or throttling limits. Supports backfilling existing data in the table.
Which type of trigger should you use?

A. tumbling window
B. on-demand
C. event
D. schedule

Answer: A

Explanation:
The Tumbling window trigger supports backfill scenarios. Pipeline runs can be scheduled for windows in the past.
Reference:
https://docs.microsoft.com/en-us/azure/data-factory/concepts-pipeline-execution-triggers

NEW QUESTION 222
- (Exam Topic 5)
Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You have two Azure SQL Database servers named Server1 and Server2. Each server contains an Azure SQL database named Database1.
You need to restore Database1 from Server1 to Server2. The solution must replace the existing Database1 on Server2.
Solution: From the Azure portal, you delete Database1 from Server2, and then you create a new database on Server2 by using the backup of Database1 from Server1.
Does this meet the goal?

A. Yes
B. No

Answer: B

Explanation:
Instead restore Database1 from Server1 to the Server2 by using the RESTORE Transact-SQL command and the REPLACE option.
Note: REPLACE should be used rarely and only after careful consideration. Restore normally prevents accidentally overwriting a database with a different database. If the database specified in a RESTORE statement already exists on the current server and the specified database family GUID differs from the database family GUID recorded in the backup set, the database is not restored. This is an important safeguard.
Reference:
https://docs.microsoft.com/en-us/sql/t-sql/statements/restore-statements-transact-sql

NEW QUESTION 223
- (Exam Topic 5)
You have SQL Server on an Azure virtual machine that contains a database named Db1.
You need to enable automatic tuning for Db1.
How should you complete the statements? To answer, select the appropriate answer in the answer area.
NOTE: Each correct selection is worth one point.

ALTER DATABASE [Db1]

▼
SET AUTOMATIC_TUNING (FORCE_LAST_GOOD_PLAN=OFF)
SET AUTOMATIC_TUNING (FORCE_LAST_GOOD_PLAN=ON)
SET AUTOMATIC_TUNING=AUTO
SET QUERY_STORE=OFF
SET QUERY_STORE=ON(OPERATION_MODE=READ_ONLY)
SET QUERY_STORE=ON(OPERATION_MODE=READ_WRITE)

GO

ALTER DATABASE [Db1]

▼
SET AUTOMATIC_TUNING (FORCE_LAST_GOOD_PLAN=OFF)
SET AUTOMATIC_TUNING (FORCE_LAST_GOOD_PLAN=ON)
SET AUTOMATIC_TUNING=AUTO
SET QUERY_STORE=OFF
SET QUERY_STORE=ON(OPERATION_MODE=READ_ONLY)
SET QUERY_STORE=ON(OPERATION_MODE=READ_WRITE)

GO

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Box 1: SET AUTOMATIC_TUNING = AUTO
To enable automatic tuning on a single database via T-SQL, connect to the database and execute the following query:
ALTER DATABASE current SET AUTOMATIC_TUNING = AUTO
Setting automatic tuning to AUTO will apply Azure Defaults.
Box 2: SET AUTOMATIC_TUNING (FORCE_LAST_GOOD_PLAN = ON)
To configure individual automatic tuning options via T-SQL, connect to the database and execute the query such as this one:
ALTER DATABASE current SET AUTOMATIC_TUNING (FORCE_LAST_GOOD_PLAN = ON)
Setting the individual tuning option to ON will override any setting that database inherited and enable the tuning option. Setting it to OFF will also override any setting that database inherited and disable the tuning option.
Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/database/automatic-tuning-enable

NEW QUESTION 225
- (Exam Topic 5)
Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You have SQL Server 2019 on an Azure virtual machine.
You are troubleshooting performance issues for a query in a SQL Server instance.
To gather more information, you query sys.dm_exec_requests and discover that the wait type is PAGELATCH_UP and the wait_resource is 2:3:905856.
You need to improve system performance.
Solution: You reduce the use of table variables and temporary tables. Does this meet the goal?

A. Yes
B. No

Answer: A

Explanation:
Reference:
https://docs.microsoft.com/en-US/troubleshoot/sql/performance/recommendations-reduce-allocation-contention

NEW QUESTION 228
- (Exam Topic 5)
You have an Azure subscription that contains the resources shown in the following table.

Name	Type
App1	Azure web app
db1	Azure SQL database in the serverless tier

App1 experiences transient connection errors and timeouts when it attempts to access db1 after extended periods of inactivity. You need to modify db1 to resolve the issues experienced by App1 as soon as possible, without considering immediate costs. What should you do?
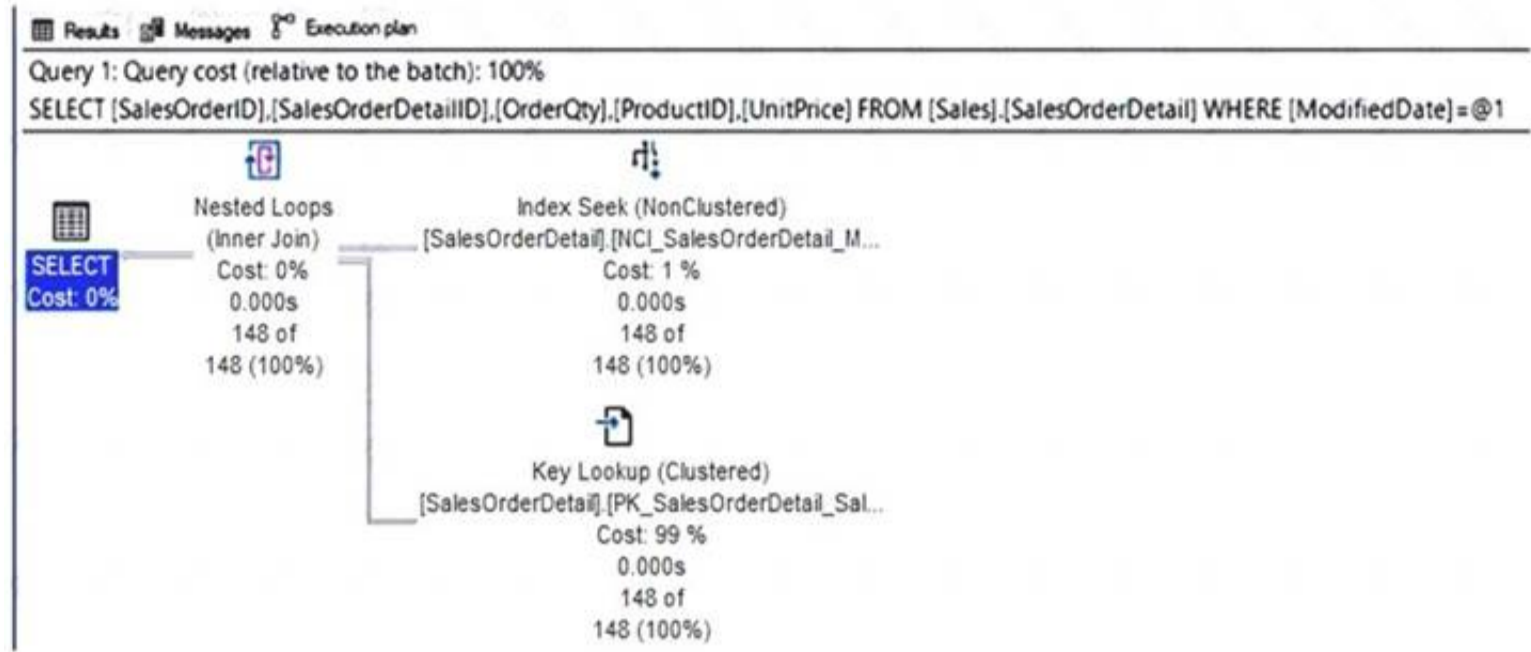
A. Increase the number Of vCores allocated to db1.

B. Disable auto-pause delay for dbl.
C. Decrease the auto-pause delay for db1.
D. Enable automatic tuning for db1.

Answer: D

NEW QUESTION 231
- (Exam Topic 5)
You have an Azure SQL database.
You have a query and the associated execution plan as shown in the following exhibit.

Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic.
NOTE: Each correct selection is worth one point.

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Graphical user interface, text, application, email Description automatically generated
Box 1: Key Lookup
The Key Lookup cost is 99% so that is the performance bottleneck. Box 2: nonclustered index
The key lookup on the clustered index is used because the nonclustered index does not include the required columns to resolve the query. If you add the required columns to the nonclustered index, the key lookup will not be required.

NEW QUESTION 234
- (Exam Topic 5)
You have a SQL Server on Azure Virtual Machines instance that hosts a database named Db1. You need to configure the autogrow and autoshrink settings for DB1.
Which statements should you use? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

Autogrow:

```
ALTER DATABASE MODIFY File and Filegroup options
ALTER DATABASE SCOPED CONFIGURATION
ALTER DATABASE SET options
```

Autoshrink:

```
ALTER DATABASE MODIFY File and Filegroup options
ALTER DATABASE SCOPED CONFIGURATION
ALTER DATABASE SET options
```

A. Mastered
B. Not Mastered

Answer: A

Explanation:
https://learn.microsoft.com/en-us/troubleshoot/sql/admin/considerations-autogrow-autoshrink

NEW QUESTION 235
- (Exam Topic 5)
You have two Azure virtual machines named VM1 and VM2 that run Windows Server 2019. VM1 and VM2 each host a default Microsoft SQL Server 2019 instance. VM1 contains a database named DB1 that is backed up to a file named D:\DB1.bak.
You plan to deploy an Always On availability group that will have the following configurations:

≫ VM1 will host the primary replica of DB1.

≫ VM2 will host a secondary replica of DB1.
You need to prepare the secondary database on VM2 for the availability group.
How should you complete the Transact-SQL statement? To answer, select the appropriate options in the answer area.

```
▼           DATABASE MyDB1
BACKUP
CREATE
RESTORE
      FROM DISK = 'D:\DB1.bak'
    WITH                      ▼
GO
           NORECOVERY
           RECOVERY
           STANDBY
```

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Graphical user interface, text, application, chat or text message Description automatically generated
Reference:
https://docs.microsoft.com/en-us/sql/database-engine/availability-groups/windows/manually-prepare-a-secondar

NEW QUESTION 236
- (Exam Topic 5)
You have a data warehouse in Azure Synapse Analytics.
You need to ensure that the data in the data warehouse is encrypted at rest. What should you enable?

A. Transparent Data Encryption (TDE)
B. Advanced Data Security for this database
C. Always Encrypted for all columns
D. Secure transfer required

Answer: A

Explanation:
Transparent data encryption (TDE) helps protect Azure SQL Database, Azure SQL Managed Instance, and Azure Synapse Analytics against the threat of

malicious offline activity by encrypting data at rest.
Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/database/transparent-data-encryption-tde-overview

NEW QUESTION 237
- (Exam Topic 5)
You have SQL Server on an Azure virtual machine.
You review the query plan shown in the following exhibit.
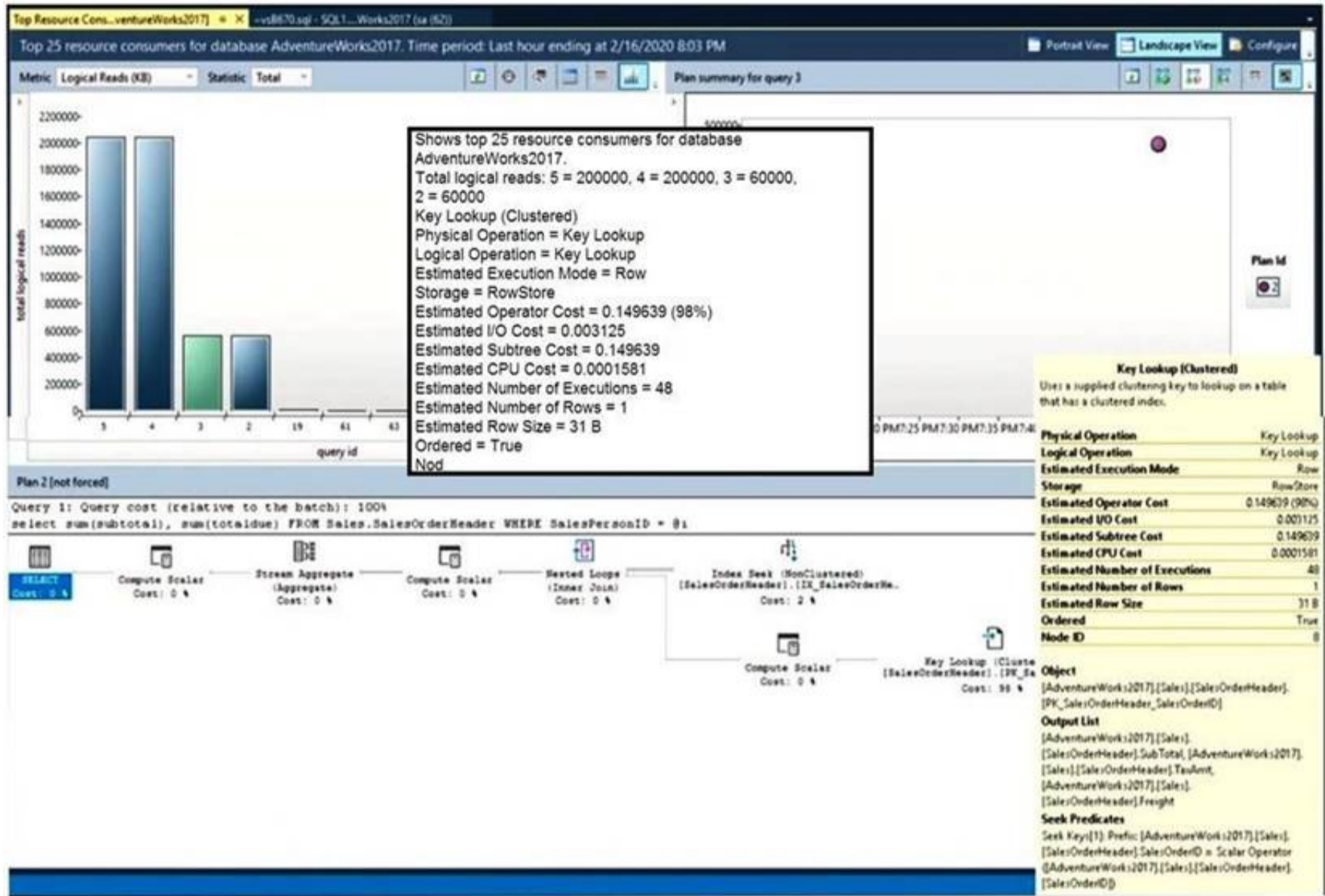
For each of the following statements, select yes if the statement is true. Otherwise, select no.
NOTE: Each correct selection is worth one point.

Statements	Yes	No
You will reduce the I/O usage and the query execution time if you force the query plan.	○	○
You will increase the I/O usage and the query execution time if you create a new index on the SalesOrderHeader table.	○	○
You will reduce the I/O usage and the query execution time if you include the SubTotal, TaxAmt, and Freight columns in the PK_SalesOrderHeader_SalesOrderID index.	○	○

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Reference:
https://docs.microsoft.com/en-us/sql/relational-databases/performance/monitoring-performance-by-using-the-qu

NEW QUESTION 238
- (Exam Topic 5)
You have an Azure SQL database named DB3.
You need to provide a user named DevUser with the ability to view the properties of DB3 from Microsoft SQL Server Management Studio (SSMS) as shown in the exhibit. (Click the Exhibit tab.)
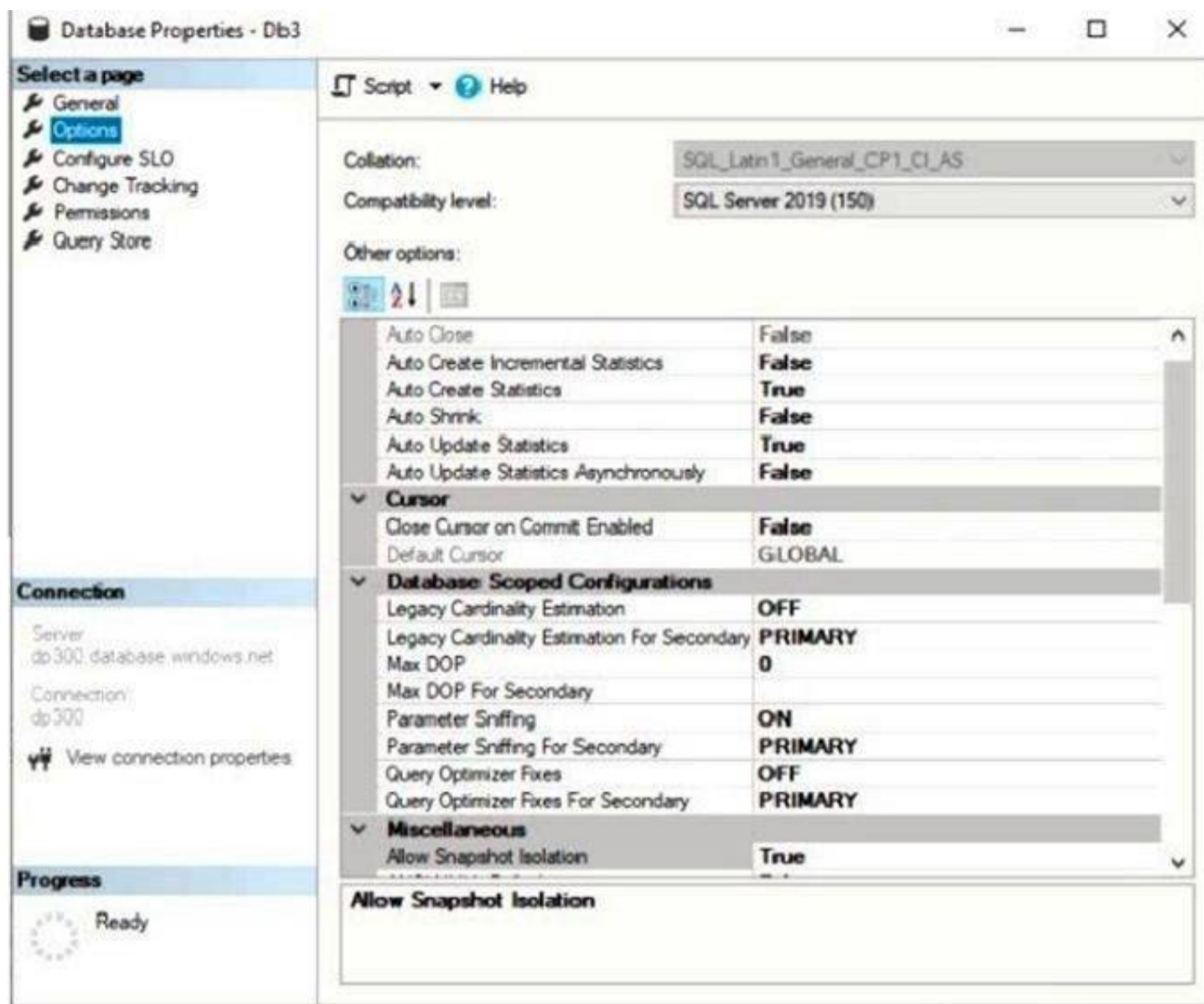
Which Transact-SQL command should you run?

A. GRANT SHOWPLAN TO DevUser
B. GRANT VIEW DEFINITION TO DevUser
C. GRANT VIEW DATABASE STATE TO DevUser
D. GRANT SELECT TO DevUser

Answer: C

Explanation:
The exhibits displays Database [State] properties.
To query a dynamic management view or function requires SELECT permission on object and VIEW SERVER STATE or VIEW DATABASE STATE permission.
Reference:
https://docs.microsoft.com/en-us/sql/relational-databases/databases/database-properties-options-page

NEW QUESTION 241
- (Exam Topic 5)
You have an Azure SQL database named DB1.
You need to display the estimated execution plan of a query by using the query editor in the Azure portal. What should you do first?

A. Run the set showplan_all Transact-SQL statement.
B. For DB1, set QUERY_CAPTURE_MODE of Query Store to All.
C. Run the set forceplan Transact-SQL statement.
D. Enable Query Store for DB1.

Answer: A

Explanation:
Reference:
https://docs.microsoft.com/en-us/sql/t-sql/statements/set-showplan-all-transact-sql?view=sql-server-ver15

NEW QUESTION 244
- (Exam Topic 5)
Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You have SQL Server 2019 on an Azure virtual machine.
You are troubleshooting performance issues for a query in a SQL Server instance.
To gather more information, you query sys.dm_exec_requests and discover that the wait type is PAGELATCH_UP and the wait_resource is 2:3:905856.
You need to improve system performance. Solution: You shrink the transaction log file. Does this meet the goal?

A. Yes
B. No

Answer: B

Explanation:
Reference:
https://docs.microsoft.com/en-US/troubleshoot/sql/performance/recommendations-reduce-allocation-contention

NEW QUESTION 245
- (Exam Topic 5)
You need to apply 20 built-in Azure Policy definitions to all new and existing Azure SQL Database deployments in an Azure subscription. The solution must minimize administrative effort.
Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Step 1: Create an Azure Policy Initiative
The first step in enforcing compliance with Azure Policy is to assign a policy definition. A policy definition defines under what condition a policy is enforced and what effect to take.
With an initiative definition, you can group several policy definitions to achieve one overarching goal. An initiative evaluates resources within scope of the assignment for compliance to the included policies.
Step 2: Create an Azure Policy Initiative assignment
Assign the initiative definition you created in the previous step. Step 3: Run Azure Policy remediation tasks
To apply the Policy Initiative to the existing SQL databases. Reference:
https://docs.microsoft.com/en-us/azure/governance/policy/tutorials/create-and-manage

NEW QUESTION 250
- (Exam Topic 5)
You have an Azure SQL database named db1.
You need to retrieve the resource usage of db1 from the last week.
How should you complete the statement? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Box 1: sys.resource_stats
sys.resource_stats returns CPU usage and storage data for an Azure SQL Database. It has database_name and start_time columns.
Box 2: DateAdd
The following example returns all databases that are averaging at least 80% of compute utilization over the last one week.
DECLARE @s datetime; DECLARE @e datetime;
SET @s= DateAdd(d,-7,GetUTCDate()); SET @e= GETUTCDATE();
SELECT database_name, AVG(avg_cpu_percent) AS Average_Compute_Utilization FROM sys.resource_stats
WHERE start_time BETWEEN @s AND @e GROUP BY database_name
HAVING AVG(avg_cpu_percent) >= 80
Reference:
https://docs.microsoft.com/en-us/sql/relational-databases/system-catalog-views/sys-resource-stats-azure-sql-data

NEW QUESTION 254
- (Exam Topic 5)
You have an Azure Synapse Analytics workspace named WS1 that contains an Apache Spark pool named Pool1.
You plan to create a database named DB1 in Pool1.
You need to ensure that when tables are created in DB1, the tables are available automatically as external tables to the built-in serverless SQL pool.
Which format should you use for the tables in DB1?

A. JSON
B. CSV
C. Parquet
D. ORC

Answer: C

Explanation:
Serverless SQL pool can automatically synchronize metadata from Apache Spark. A serverless SQL pool database will be created for each database existing in serverless Apache Spark pools.
For each Spark external table based on Parquet and located in Azure Storage, an external table is created in a serverless SQL pool database. As such, you can shut down your Spark pools and still query Spark external tables from serverless SQL pool.
Reference:
https://docs.microsoft.com/en-us/azure/synapse-analytics/sql/develop-storage-files-spark-tables

NEW QUESTION 257
- (Exam Topic 5)
You have a SQL Server on Azure Virtual Machines instance named VM1 that hosts a database named DB1. You run the following query.

```
BACKUP LOG DB1 TO DISK = '\\File1\SQLBackups\DB1.trn'
WITH NORECOVERY,COPY_ONLY,CONTINUE_AFTER_ERROR;
GO
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

Answer Area

Statements	Yes	No
The log file will be truncated.	○	○
DB1 will be placed in an offline state.	○	○
You are performing a tail-log backup.	○	○

A. Mastered
B. Not Mastered

Answer: A

Explanation:

Answer Area

Statements	Yes	No
The log file will be truncated.	○	○
DB1 will be placed in an offline state.	○	○
You are performing a tail-log backup.	○	○

NEW QUESTION 262
- (Exam Topic 5)
You have an Azure SQL database named DB1. The automatic tuning options for DB1 are configured as shown in the following exhibit.

Azure SQL Database built-in intelligence automatically tunes your databases to optimize performance. Click here to learn more about automatic tuning

Inherit from: ❶

| Server | **Azure defaults** | Don't inherit |

❶ The database is inheriting automatic tuning configuration from Azure defaults.

Configure the automatic tuning options ❶

OPTION	DESIRED STATE	CURRENT STATE
FORCE PLAN	ON / OFF / **INHERIT**	ON Auto-configured by Azure
CREATE INDEX	ON / OFF / **INHERIT**	ON Auto-configured by Azure
DROP INDEX	**ON** / OFF / INHERIT	ON Forced by user

For each of the following statements, select Yes if the statement is true. Otherwise, select No.
NOTE: Each correct selection is worth one point.

Statements	Yes	No
Nonclustered indexes will be added to tables to improve performance.	○	○
Columns will be added to existing indexes automatically.	○	○
The query execution plan will revert to a previous plan if query performance degrades.	○	○

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Box 1: Yes
We see: Tuning option: Create index ON
CREATE INDEX - Identifies indexes that may improve performance of your workload, creates indexes, and automatically verifies that performance of queries has improved.
Box 2: No
Box 3: Yes
FORCE LAST GOOD PLAN (automatic plan correction) - Identifies Azure SQL queries using an execution plan that is slower than the previous good plan, and queries using the last known good plan instead of the regressed plan.

NEW QUESTION 267
- (Exam Topic 5)
You have an Always On availability group deployed to Azure virtual machines. The availability group contains a database named DB1 and has two nodes named SQL1 and SQL2. SQL1 is the primary replica.
You need to initiate a full backup of DB1 on SQL2. Which statement should you run?

A. BACKUP DATABASE DB1 TO URL='https://mystorageaccount.blob.core.windows.net/ mycontainer/DB1.bak' with (Differential, STATS=5, COMPRESSION);
B. BACKUP DATABASE DB1 TO URL='https://mystorageaccount.blob.core.windows.net/ mycontainer/DB1.bak' with (COPY_ONLY, STATS=5, COMPRESSION);
C. BACKUP DATABASE DB1 TO URL='https://mystorageaccount.blob.core.windows.net/ mycontainer/DB1.bak' with (File_Snapshot, STATS=5, COMPRESSION);
D. BACKUP DATABASE DB1 TO URL='https://mystorageaccount.blob.core.windows.net/ mycontainer/DB1.bak' with (NoInit, STATS=5, COMPRESSION);

Answer: B

Explanation:
BACKUP DATABASE supports only copy-only full backups of databases, files, or filegroups when it's executed on secondary replicas. Copy-only backups don't impact the log chain or clear the differential bitmap.
Reference:
https://docs.microsoft.com/en-us/sql/database-engine/availability-groups/windows/active-secondaries-backup-on

NEW QUESTION 268
- (Exam Topic 5)
You have an Azure Data Lake Storage Gen2 container.
Data is ingested into the container, and then transformed by a data integration application. The data is NOT modified after that. Users can read files in the container but cannot modify the files.
You need to design a data archiving solution that meets the following requirements:

≫ New data is accessed frequently and must be available as quickly as possible.

≫ Data that is older than five years is accessed infrequently but must be available within one second when requested.

≫ Data that us older than seven years is NOT accessed. After seven years, the data must be persisted at the lowest cost possible.

≫ Costs must be minimized while maintaining the required availability.

How should you manage the data? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

Five-year-old data:
- Delete the blob.
- Move to archive storage.
- Move to cool storage.
- Move to hot storage.

Seven-year-old data:
- Delete the blob.
- Move to archive storage.
- Move to cool storage.
- Move to hot storage.

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Text, table Description automatically generated
Box 1: Move to cool storage
The cool access tier has lower storage costs and higher access costs compared to hot storage. This tier is intended for data that will remain in the cool tier for at least 30 days. Example usage scenarios for the cool access tier include:
Short-term backup and disaster recovery
Older data not used frequently but expected to be available immediately when accessed
Large data sets that need to be stored cost effectively, while more data is being gathered for future processing Note: Hot - Optimized for storing data that is accessed frequently.
Cool - Optimized for storing data that is infrequently accessed and stored for at least 30 days.
Archive - Optimized for storing data that is rarely accessed and stored for at least 180 days with flexible latency requirements, on the order of hours.
Box 2: Move to archive storage
Example usage scenarios for the archive access tier include: Long-term backup, secondary backup, and archival datasets
Original (raw) data that must be preserved, even after it has been processed into final usable form Compliance and archival data that needs to be stored for a long time and is hardly ever accessed Reference:
https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-storage-tiers

NEW QUESTION 270
- (Exam Topic 5)
You have an Azure virtual machine named VM1 on a virtual network named VNet1. Outbound traffic from VM1 to the internet is blocked.
You have an Azure SQL database named SqlDb1 on a logical server named SqlSrv1.
You need to implement connectivity between VM1 and SqlDb1 to meet the following requirements:

≫ Ensure that VM1 cannot connect to any Azure SQL Server other than SqlSrv1.

≫ Restrict network connectivity to SqlSrv1. What should you create on VNet1?

A. a VPN gateway
B. a service endpoint
C. a private link
D. an ExpressRoute gateway

Answer: B

Explanation:
Azure Private Link enables you to access Azure PaaS Services (for example, Azure Storage and SQL Database) and Azure hosted customer-owned/partner services over a private endpoint in your virtual network.
Traffic between your virtual network and the service travels the Microsoft backbone network. Exposing your service to the public internet is no longer necessary.

Reference:
https://docs.microsoft.com/en-us/azure/private-link/private-link-overview

NEW QUESTION 273
- (Exam Topic 5)
You have SQL Server on an Azure virtual machine that contains a database named DB1. DB1 contains a table named CustomerPII.
You need to record whenever users query the CustomerPII table.
Which two options should you enable? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A. server audit specification
B. SQL Server audit
C. database audit specification
D. a server principal

Answer: AC

Explanation:
An auditing policy can be defined for a specific database or as a default server policy in Azure (which hosts SQL Database or Azure Synapse):
⮞ A server policy applies to all existing and newly created databases on the server.
⮞ If server auditing is enabled, it always applies to the database. The database will be audited, regardless of the database auditing settings.
⮞ Enabling auditing on the database, in addition to enabling it on the server, does not override or change any of the settings of the server auditing. Both audits will exist side by side.
Note:
The Server Audit Specification object belongs to an audit.
A Database Audit Specification defines which Audit Action Groups will be audited for the specific database in which the specification is created. Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/database/auditing-overview

NEW QUESTION 278
- (Exam Topic 5)
You have an Azure subscription that uses a domain named contoso.com.
You have two Azure VMs named DBServer1 and DBServer2. Each of them hosts a default SQL Server instance. DBServer1 is in the East US Azure region and contains a database named DatabaseA. DBServer2 is in the West US Azure region.
DBServer1 has a high volume of data changes and low latency requirements for data writes.
You need to configure a new availability group for DatabaseA. The secondary replica will reside on DBServer2.
What should you do?

A. Configure the primary endpoint as TCP://DBServer1.contoso.com:445, configure the secondary endpoint as TCP://DBServer2.contoso.com:445, and set the availability mode to Asynchronous.
B. Configure the primary endpoint as TCP://DBServer1.contoso.com:445, configure the secondary endpoint as TCP://DBServer2.contoso.com:445, and set the availability mode to Synchronous.
C. Configure the primary endpoint as TCP://DBServer1.contoso.com:5022, configure the secondary endpoint as TCP://DBServer2.contoso.com:5022, and set the availability mode to Asynchronous.
D. Configure the primary endpoint as TCP://DBServer1.contoso.com:5022, configure the secondary endpoint as TCP://DBServer2.contoso.com:5022, and set the availability mode to Synchronous.

Answer: C

Explanation:
Reference:
https://docs.microsoft.com/en-us/sql/database-engine/availability-groups/windows/availability-modes-always-on

NEW QUESTION 280
- (Exam Topic 5)
You have an Azure subscription that contains a logical SQL server named Serverl. The master database of Serverl contains a user named Userl. You need to ensure that Userl can create databases on Serverl. Which database role should you assign to Userl?

A. db_owner
B. dbmanager
C. dbo
D. db_ddladmin

Answer: B

NEW QUESTION 285
- (Exam Topic 5)
You have an Azure SQL managed instance.
You need to gather the last execution of a query plan and its runtime statistics. The solution must minimize the impact on currently running queries.
What should you do?

A. Generate an estimated execution plan.
B. Generate an actual execution plan.
C. Run sys.dm_exec_query_plan_scacs.
D. Generate Live Query Statistics.

Answer: C

Explanation:

Reference:
https://docs.microsoft.com/en-us/sql/relational-databases/system-dynamic-management-views/sys-dm-exec-quer

NEW QUESTION 290
- (Exam Topic 5)
You are designing a security model for an Azure Synapse Analytics dedicated SQL pool that will support multiple companies.
You need to ensure that users from each company can view only the data of their respective company. Which two objects should you include in the solution? Each correct answer presents part of the solution. NOTE: Each correct selection is worth one point.

A. a column encryption key
B. asymmetric keys
C. a function
D. a custom role-based access control (RBAC) role
E. a security policy

Answer: DE

Explanation:
Azure RBAC is used to manage who can create, update, or delete the Synapse workspace and its SQL pools, Apache Spark pools, and Integration runtimes.
Define and implement network security configurations for resources related to your dedicated SQL pool with Azure Policy.
Reference:
https://docs.microsoft.com/en-us/azure/synapse-analytics/security/synapse-workspace-synapse-rbac https://docs.microsoft.com/en-us/security/benchmark/azure/baselines/synapse-analytics-security-baseline

NEW QUESTION 295
- (Exam Topic 4)
You need to implement the surrogate key for the retail store table. The solution must meet the sales transaction dataset requirements.
What should you create?

A. a table that has a FOREIGN KEY constraint
B. a table the has an IDENTITY property
C. a user-defined SEQUENCE object
D. a system-versioned temporal table

Answer: B

Explanation:
Scenario: Contoso requirements for the sales transaction dataset include: Implement a surrogate key to account for changes to the retail store addresses.
A surrogate key on a table is a column with a unique identifier for each row. The key is not generated from the table data. Data modelers like to create surrogate keys on their tables when they design data warehouse models. You can use the IDENTITY property to achieve this goal simply and effectively without affecting load performance.
Reference:
https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-tablesidentity

NEW QUESTION 296
- (Exam Topic 4)
You need to design an analytical storage solution for the transactional data. The solution must meet the sales transaction dataset requirements.
What should you include in the solution? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Graphical user interface, text, application Description automatically generated
Box 1: Hash Scenario:
Ensure that queries joining and filtering sales transaction records based on product ID complete as quickly as possible.
A hash distributed table can deliver the highest query performance for joins and aggregations on large tables. Box 2: Round-robin
Scenario:
You plan to create a promotional table that will contain a promotion ID. The promotion ID will be associated to a specific product. The product will be identified by a product ID. The table will be approximately 5 GB.
A round-robin table is the most straightforward table to create and delivers fast performance when used as a staging table for loads. These are some scenarios where you should choose Round robin distribution:

> When you cannot identify a single key to distribute your data.

> If your data doesn't frequently join with data from other tables.

> When there are no obvious keys to join.

Reference:

https://rajanieshkaushikk.com/2020/09/09/how-to-choose-right-data-distribution-strategy-for-azure-synapse/

NEW QUESTION 299

- (Exam Topic 3)

Which counter should you monitor for real-time processing to meet the technical requirements?

A. SU% Utilization
B. CPU% utilization
C. Concurrent users
D. Data Conversion Errors

Answer: B

Explanation:

Scenario: Real-time processing must be monitored to ensure that workloads are sized properly based on actual usage patterns.

To monitor the performance of a database in Azure SQL Database and Azure SQL Managed Instance, start by monitoring the CPU and IO resources used by your workload relative to the level of database performance you chose in selecting a particular service tier and performance level.

Reference:

https://docs.microsoft.com/en-us/azure/azure-sql/database/monitor-tune-overview

NEW QUESTION 301

- (Exam Topic 3)

Which windowing function should you use to perform the streaming aggregation of the sales data?

A. Sliding
B. Hopping
C. Session
D. Tumbling

Answer: D

Explanation:

Scenario: The sales data, including the documents in JSON format, must be gathered as it arrives and analyzed online by using Azure Stream Analytics. The analytics process will perform aggregations that must be done continuously, without gaps, and without overlapping.

Tumbling window functions are used to segment a data stream into distinct time segments and perform a function against them, such as the example below. The key differentiators of a Tumbling window are that they repeat, do not overlap, and an event cannot belong to more than one tumbling window.

Timeline Description automatically generated


```
SELECT TimeZone, COUNT(*) AS Count
FROM TwitterStream TIMESTAMP BY CreatedAt
GROUP BY TimeZone, TumblingWindow(second,10)
```

Reference:

https://github.com/MicrosoftDocs/azure-docs/blob/master/articles/stream-analytics/stream-analytics-window-fun

NEW QUESTION 304

- (Exam Topic 2)

You need to implement a solution to notify the administrators. The solution must meet the monitoring requirements.

What should you do?

A. Create an Azure Monitor alert rule that has a static threshold and assign the alert rule to an action group.
B. Add a diagnostic setting that logs QueryStoreRuntimeStatistics and streams to an Azure event hub.
C. Add a diagnostic setting that logs Timeouts and streams to an Azure event hub.
D. Create an Azure Monitor alert rule that has a dynamic threshold and assign the alert rule to an action group.

Answer: D

Explanation:
Reference:
https://azure.microsoft.com/en-gb/blog/announcing-azure-monitor-aiops-alerts-with-dynamic-thresholds/

NEW QUESTION 308
- (Exam Topic 1)
You need to recommend a configuration for ManufacturingSQLDb1 after the migration to Azure. The solution must meet the business requirements.
What should you include in the recommendation? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

Quorum model:
- Cloud witness
- Disk witness
- File share witness

Azure resource for the availability group listener:
- Azure Application Gateway
- Azure Basic Load Balancer

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Scenario: Business Requirements
Litware identifies business requirements include: meet an SLA of 99.99% availability for all Azure deployments.
Box 1: Cloud witness
If you have a Failover Cluster deployment, where all nodes can reach the internet (by extension of Azure), it is recommended that you configure a Cloud Witness as your quorum witness resource.
Box 2: Azure Basic Load Balancer
Microsoft guarantees that a Load Balanced Endpoint using Azure Standard Load Balancer, serving two or more Healthy Virtual Machine Instances, will be available 99.99% of the time.
Note: There are two main options for setting up your listener: external (public) or internal. The external (public) listener uses an internet facing load balancer and is associated with a public Virtual IP (VIP) that is accessible over the internet. An internal listener uses an internal load balancer and only supports clients within the same Virtual Network.
Reference:
https://technet.microsoft.com/windows-server-docs/failover-clustering/deploy-cloud-witness https://azure.microsoft.com/en-us/support/legal/sla/load-balancer/v1_0/

NEW QUESTION 312
- (Exam Topic 1)
You need to recommend the appropriate purchasing model and deployment option for the 30 new databases. The solution must meet the technical requirements and the business requirements.
What should you recommend? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

Purchasing model:
- Azure virtual machine reserved instances
- DTU
- vCore

Deployment option:
- An Azure SQL Database elastic pool
- An Azure SQL Database managed instance
- A SQL Server Always On availability group

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Box 1: DTU
Scenario:
≫ The 30 new databases must scale automatically.

> Once all requirements are met, minimize costs whenever possible.

You can configure resources for the pool based either on the DTU-based purchasing model or the vCore-based purchasing model.

In short, for simplicity, the DTU model has an advantage. Plus, if you're just getting started with Azure SQL Database, the DTU model offers more options at the lower end of performance, so you can get started at a lower price point than with vCore.

Box 2: An Azure SQL database elastic pool

Azure SQL Database elastic pools are a simple, cost-effective solution for managing and scaling multiple databases that have varying and unpredictable usage demands. The databases in an elastic pool are on a single server and share a set number of resources at a set price. Elastic pools in Azure SQL Database enable SaaS developers to optimize the price performance for a group of databases within a prescribed budget while delivering performance elasticity for each database.

Reference:

https://docs.microsoft.com/en-us/azure/azure-sql/database/elastic-pool-overview https://docs.microsoft.com/en-us/azure/azure-sql/database/reserved-capacity-overview

NEW QUESTION 316
- (Exam Topic 1)
You need to identify the cause of the performance issues on SalesSQLDb1.
Which two dynamic management views should you use? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A. sys.dm_pdw_nodes_tran_locks
B. sys.dm_exec_compute_node_errors
C. sys.dm_exec_requests
D. sys.dm_cdc_errors
E. sys.dm_pdw_nodes_os_wait_stats
F. sys.dm_tran_locks

Answer: AE

Explanation:
SalesSQLDb1 experiences performance issues that are likely due to out-of-date statistics and frequent
blocking queries.
A: Use sys.dm_pdw_nodes_tran_locks instead of sys.dm_tran_locks from Azure Synapse Analytics (SQL Data Warehouse) or Parallel Data Warehouse.
E: Example:
The following query will show blocking information. SELECT
t1.resource_type, t1.resource_database_id, t1.resource_associated_entity_id, t1.request_mode, t1.request_session_id, t2.blocking_session_id
FROM sys.dm_tran_locks as t1
INNER JOIN sys.dm_os_waiting_tasks as t2
ON t1.lock_owner_address = t2.resource_address;
Note: Depending on the system you're working with you can access these wait statistics from one of three locations:
sys.dm_os_wait_stats: for SQL Server sys.dm_db_wait_stats: for Azure SQL Database
sys.dm_pdw_nodes_os_wait_stats: for Azure SQL Data Warehouse Reference:
https://docs.microsoft.com/en-us/sql/relational-databases/system-dynamic-management-views/sys-dm-tran-lock

NEW QUESTION 320
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