

Question #56

Topic 1

## DRAG DROP -

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 solution 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.

Select and Place:

## Values

CustomerKey

HASH

ROUND\_ROBIN

REPLICATE

OrderDateKey

SalesOrderNumber

## Answer Area

```
CREATE TABLE [dbo].[FactSales]
(
    [ProductKey]          int          NOT NULL
,   [OrderDateKey]       int          NOT NULL
,   [CustomerKey]        int          NOT NULL
,   [SalesOrderNumber]   nvarchar ( 20 ) NOT NULL
,   [OrderQuantity]      smallint     NOT NULL
,   [UnitPrice]          money        NOT NULL
)
WITH
(   CLUSTERED            COLUMNSTORE      INDEX
,   DISTRIBUTION = Value ([ProductKey])
,   PARTITION ( [ Value ] RANGE RIGHT FOR VALUES
                (20170101,20180101,20190101,20200101,20210101)
                )
)
```

**HOTSPOT -**

You have an Azure Data Lake Storage Gen2 service.

You need to design a data archiving solution that meets the following requirements:

- ☞ Data that is older than five years is accessed infrequently but must be available within one second when requested.
- ☞ Data that is older than seven years is NOT accessed.
- ☞ 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.

Hot Area:

**Answer Area**

Data over five years old:

	▼
Delete the blob.	
Move to archive storage.	
Move to cool storage.	
Move to hot storage.	

Data over seven years old:

	▼
Delete the blob.	
Move to archive storage.	
Move to cool storage.	
Move to hot storage.	

**HOTSPOT -**

You plan to create an Azure Data Lake Storage Gen2 account.

You need to recommend a storage solution that meets the following requirements:

- ☐ Provides the highest degree of data resiliency
- ☐ Ensures that content remains available for writes if a primary data center fails

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.

Hot Area:

**Answer Area**

Replication mechanism:

Change feed
Zone-redundant storage (ZRS)
Read-access geo-redundant storage (RA-GRS)
Read-access geo-zone-redundant storage (RA-GRS)

Failover process:

Failover initiated by Microsoft
Failover manually initiated by the customer
Failover automatically initiated by an Azure Automation job

You need to implement a Type 3 slowly changing dimension (SCD) for product category data in an Azure Synapse Analytics dedicated SQL pool. You have a table that was created by using the following Transact-SQL statement.

```
CREATE TABLE [DB0].[DimProduct] (  
    [ProductKey] [int] IDENTITY(1,1) NOT NULL,  
    [ProductSourceID] [int] NOT NULL,  
    [ProductNane] [nvarchar](100) NOT NULL,  
    [Color] [nvarchar] (15) NULL,  
    [SellStartDate] [date] NOT NULL,  
    [SellEndOate] [date] NULL,  
    [RowInsertedDateTime] [datetime] NOT NULL,  
    [RowipdatedDateTine] [datetime] NOT NULL,  
    [ETLAuditID] [int] NOT NULL  
)
```

Which two columns should you add to the table? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

A.

```
[EffectiveEndDate] [datetime] NULL,
```

B.

```
[CurrentProductCategory] [nvarchar] (100) NOT NULL,
```

C.

```
[ProductCategory] [nvarchar](100) NOT NULL,
```

D.

```
[EffectiveStartDate] [datetime] NOT NULL,
```

E.

```
[OriginalProductCategory] [nvarchar] (100) NOT NULL,
```

## DRAG DROP -

You have an Azure subscription.

You plan to build a data warehouse in an Azure Synapse Analytics dedicated SQL pool named pool1 that will contain staging tables and a dimensional model.

Pool1 will contain the following tables.

Name	Number of rows	Update frequency	Description
Common. Date	7,300	New rows inserted yearly	<ul style="list-style-type: none"> <li>Contains one row per date for the last 20 years</li> <li>Contains columns named Year, Month, Quarter, and IsWeekend</li> </ul>
Marketing.WebSessions	1,500,500,000	Hourly inserts and updates	Fact table that contains counts of and updates sessions and page views, including foreign key values for date, channel, device, and medium
Staging.WebSessions	300,000	Hourly truncation and inserts	Staging table for web session data, truncation and including descriptive fields for inserts channel, device, and medium

You need to design the table storage for pool1. The solution must meet the following requirements:

- ☞ Maximize the performance of data loading operations to Staging.WebSessions.
- ☞ Minimize query times for reporting queries against the dimensional model.

Which type of table distribution should you use for each table? To answer, drag the appropriate table distribution types to the correct tables. Each table distribution type 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.

Select and Place:

### Table distribution types

Hash

Replicated

Round-robin

### Answer Area

Common.Data:

Marketing.Web.Sessions:

Staging. Web.Sessions: