

## Question #15

## Topic 2

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 [DBO].[DimProduct] (  
  [ProductKey] [int] IDENTITY(1,1) NOT NULL,  
  [ProductSourceID] [int] NOT NULL,  
  [ProductName] [nvarchar] (100) NULL,  
  [Color] [nvarchar] (15) NULL,  
  [SellStartDate] [date] NOT NULL,  
  [SellEndDate] [date] NULL,  
  [RowInsertedDateTime] [datetime] NOT NULL,  
  [RowUpdatedDateTime] [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. [EffectiveStartDate] [datetime] NOT NULL,
- B. [CurrentProductCategory] [nvarchar] (100) NOT NULL,
- C. [EffectiveEndDate] [datetime] NULL,
- D. [ProductCategory] [nvarchar] (100) NOT NULL,
- E. [OriginalProductCategory] [nvarchar] (100) NOT NULL,

## Question #16

## Topic 2

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 are designing an Azure Stream Analytics solution that will analyze Twitter data.

You need to count the tweets in each 10-second window. The solution must ensure that each tweet is counted only once.

Solution: You use a hopping window that uses a hop size of 10 seconds and a window size of 10 seconds.

Does this meet the goal?

- A. Yes
- B. No

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 are designing an Azure Stream Analytics solution that will analyze Twitter data. You need to count the tweets in each 10-second window. The solution must ensure that each tweet is counted only once. Solution: You use a hopping window that uses a hop size of 5 seconds and a window size 10 seconds. Does this meet the goal?

- A. Yes
- B. No

**HOTSPOT -**

You are building an Azure Stream Analytics job to identify how much time a user spends interacting with a feature on a webpage. The job receives events based on user actions on the webpage. Each row of data represents an event. Each event has a type of either 'start' or 'end'. You need to calculate the duration between start and end events. How should you complete the query? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

```
SELECT
    [user],
    feature,
    

|           |
|-----------|
| DATEADD(  |
| DATEDIFF( |
| DATEPART( |


    second,
    

|         |
|---------|
| ISFIRST |
| LAST    |
| TOPONE  |


    (Time) OVER (PARTITION BY [user], feature LIMIT DURATION(hour, 1) WHEN Event = 'start'),
    Time) as duration
FROM input TIMESTAMP BY Time
WHERE
    Event = 'end'
```

You are creating an Azure Data Factory data flow that will ingest data from a CSV file, cast columns to specified types of data, and insert the data into a table in an

Azure Synapse Analytic dedicated SQL pool. The CSV file contains three columns named username, comment, and date.

The data flow already contains the following:

- ☐ A source transformation.
- ☐ A Derived Column transformation to set the appropriate types of data.
- ☐ A sink transformation to land the data in the pool.

You need to ensure that the data flow meets the following requirements:

- ☐ All valid rows must be written to the destination table.
- ☐ Truncation errors in the comment column must be avoided proactively.
- ☐ Any rows containing comment values that will cause truncation errors upon insert must be written to a file in blob storage.

Which two actions should you perform? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. To the data flow, add a sink transformation to write the rows to a file in blob storage.
- B. To the data flow, add a Conditional Split transformation to separate the rows that will cause truncation errors.
- C. To the data flow, add a filter transformation to filter out rows that will cause truncation errors.
- D. Add a select transformation to select only the rows that will cause truncation errors.

[← Previous Questions](#)[Next Questions →](#)