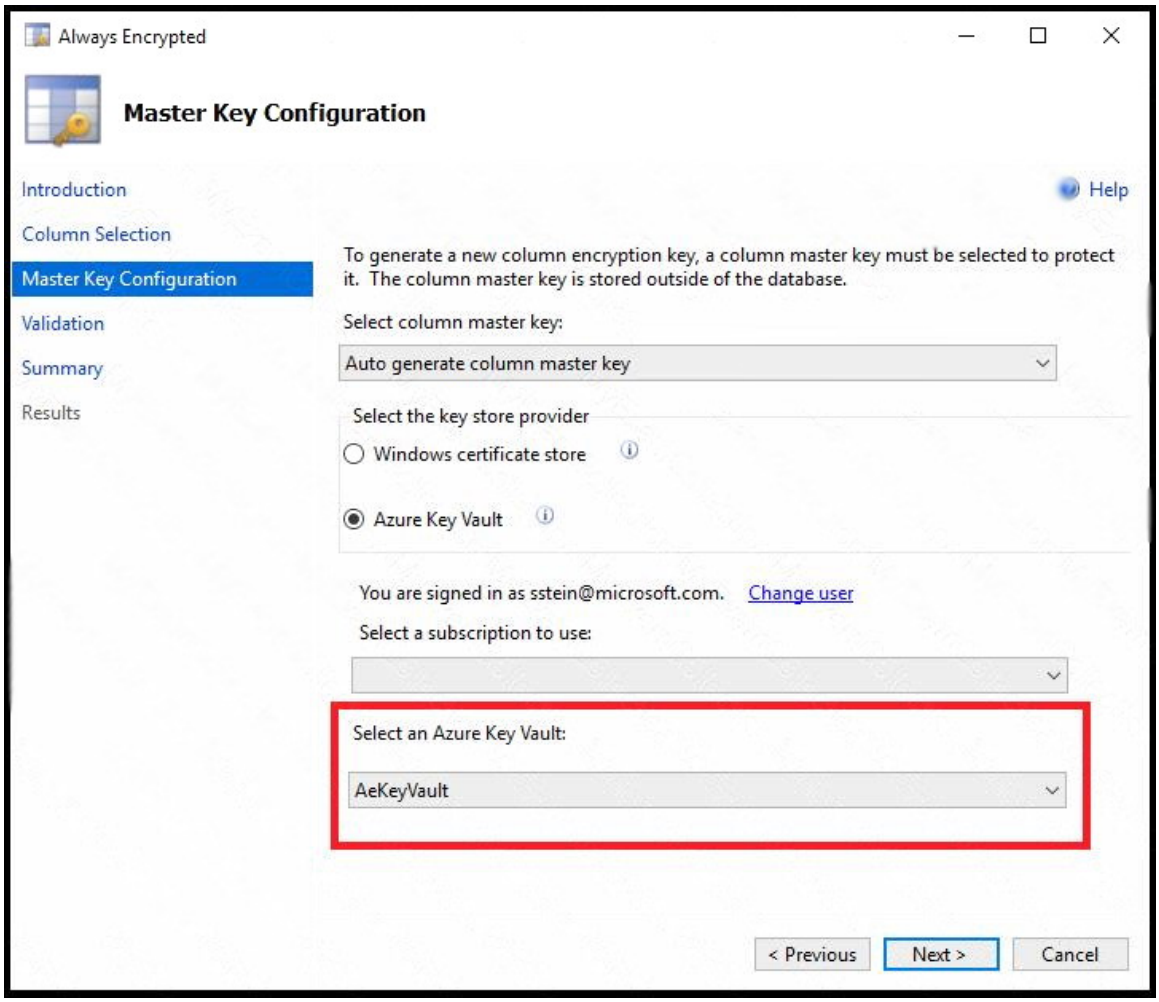
Correct Answer: A
Explanation:
We use the Azure Key Vault, not the Windows Certificate Store, to store the master key.

Note:
The Master Key Configuration page is where you set up your CMK (Column Master Key) and select the key store provider where the CMK will be stored. Currently, you can store a CMK in the Windows certificate store, Azure Key Vault, or a hardware security module (HSM).



References:
https://docs.microsoft.com/en-us/azure/sql-database/sql-database-always-encrypted-azure-key-vault

QUESTION 9
You need to process and query ingested Tier 9 data.

Which two options should you use? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

A. Azure Notification Hub
B. Transact-SQL statements
C. Azure Cache for Redis
D. Apache Kafka statements
E. Azure Event Grid
F. Azure Stream Analytics

Correct Answer: EF
Explanation:
Event Hubs provides a Kafka endpoint that can be used by your existing Kafka based applications as an alternative to running your own Kafka cluster.

You can stream data into Kafka-enabled Event Hubs and process it with Azure Stream Analytics, in the following steps:

- Create a Kafka enabled Event Hubs namespace.
- Create a Kafka client that sends messages to the event hub.
- Create a Stream Analytics job that copies data from the event hub into an Azure blob storage.

Scenario:

Internal Distribution and Sales	9	Yes, once ingested at branches	Data ingested from Contoso branches

Tier 9 reporting must be moved to Event Hubs, queried, and persisted in the same Azure region as the company's main office

References:
https://docs.microsoft.com/en-us/azure/event-hubs/event-hubs-kafka-stream-analytics

QUESTION 10
You need to set up Azure Data Factory pipelines to meet data movement requirements. Which integration runtime should you use?

A. self-hosted integration runtime
B. Azure-SSIS Integration Runtime
C. .NET Common Language Runtime (CLR)
D. Azure integration runtime

Correct Answer: A
Explanation:
The following table describes the capabilities and network support for each of the integration runtime types:

IR type	Public network	Private network
Azure	Data movement Activity dispatch	
Self-hosted	Data movement Activity dispatch	Data movement Activity dispatch
Azure-SSIS	SSIS package execution	SSIS package execution

Scenario: The solution must support migrating databases that support external and internal application to Azure SQL Database. The migrated databases will be supported by Azure Data Factory pipelines for the continued movement, migration and updating of data both in the cloud and from local core business systems and repositories.

References:
https://docs.microsoft.com/en-us/azure/data-factory/concepts-integration-runtime

Topic 3, Litware, inc

Overview
General Overview
Litware, Inc, is an international car racing and manufacturing company that has 1,000 employees. Most employees are located in Europe. The company supports racing teams that complete in a worldwide racing series.

Physical Locations
Litware has two main locations: a main office in London, England, and a manufacturing plant in Berlin, Germany.

During each race weekend, 100 engineers set up a remote portable office by using a VPN to connect the datacentre in the London office. The portable office is set up and torn down in approximately 20 different countries each year.

Existing environment
Race Central
During race weekends, Litware uses a primary application named Race Central. Each car has several sensors that send real-time telemetry data to the London datacentre. The data is used for real-time tracking of the cars.

Race Central also sends batch updates to an application named Mechanical Workflow by using Microsoft SQL Server Integration Services (SSIS).

The telemetry data is sent to a MongoDB database. A custom application then moves the data to databases in SQL Server 2017. The telemetry data in MongoDB has more than 500 attributes. The application changes the attribute names when the data is moved to SQL Server 2017.

The database structure contains both OLAP and OLTP databases.

Mechanical Workflow
Mechanical Workflow is used to track changes and improvements made to the cars during their lifetime.

Currently, Mechanical Workflow runs on SQL Server 2017 as an OLAP system.

Mechanical Workflow has a named Table1 that is 1 TB. Large aggregations are performed on a single column of Table 1.

Requirements
Planned Changes
Litware is the process of rearchitecting its data estate to be hosted in Azure. The company plans to decommission the London datacentre and move all its applications to an Azure datacentre.

Technical Requirements
Litware identifies the following technical requirements:

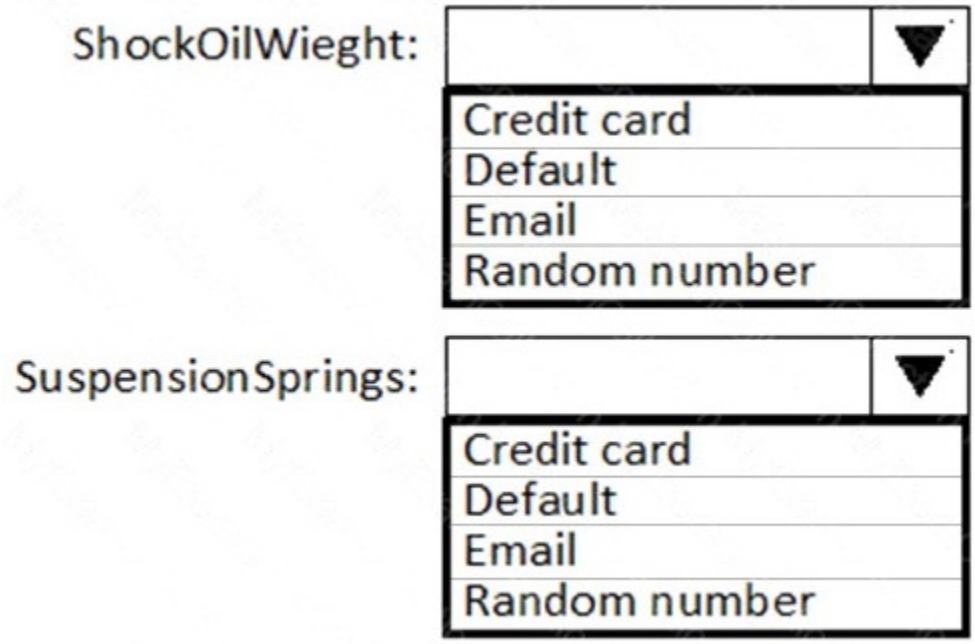
- Data collection for Race Central must be moved to Azure Cosmos DB and Azure SQL Database. The data must be written to the Azure datacentre closest to each race and must converge in the least amount of time.
- The query performance of Race Central must be stable, and the administrative time it takes to perform optimizations must be minimized.
- The datacentre for Mechanical Workflow must be moved to Azure SQL data Warehouse.
- Transparent data encryption (IDE) must be enabled on all data stores, whenever possible.
- An Azure Data Factory pipeline must be used to move data from Cosmos DB to SQL Database for Race Central. If the data load takes longer than 20 minutes, configuration changes must be made to Data Factory.
- The telemetry data must migrate toward a solution that is native to Azure.
- The telemetry data must be monitored for performance issues. You must adjust the Cosmos DB Request Units per second (RU/s) to maintain a performance SLA while minimizing the cost of the Ru/s.

Data Masking Requirements
During rare weekends, visitors will be able to enter the remote portable offices. Litware is concerned that some proprietary information might be exposed. The company identifies the following data masking requirements for the Race Central data that will be stored in SQL Database:

- Only show the last four digits of the values in a column named SuspensionSprings.
- Only Show a zero value for the values in a column named ShockOilWeight.

QUESTION 1
HOTSPOT
Which masking functions should you implement for each column to meet the data masking requirements? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.



Correct Answer: