

# Synapse

## **Performing Integrated Analytics with Azure Synapse Analytics**

- ❖ Describe Azure Synapse Analytics
- ❖ Surveying the components of Azure Synapse Analytics
- ❖ Explore Azure Synapse Studio
- ❖ Designing a Modern Data Warehouse with Azure Synapse Analytics

## **Optimizing a Data Warehouse with Azure Synapse Dedicated SQL Pools**

- ❖ Describe Azure Synapse Dedicated SQL Pools
- ❖ Understand developer features of Azure Synapse Dedicated SQL Pools
- ❖ Use data loading best practices in Azure Synapse Dedicated SQL Pools
- ❖ Optimize data warehouse query performance in Azure Synapse Dedicated SQL Pools

## **Perform Data Engineering with Azure Synapse Spark Pools**

- ❖ Understanding big data engineering with Apache Spark in Azure Synapse Analytics
- ❖ Ingesting data with Apache Spark notebooks in Azure Synapse Analytics
- ❖ Transforming data with Data Frames in Spark Pools in Azure Synapse Analytics
- ❖ Integrating SQL and Spark pools in Azure Synapse Analytics

## **Building automated data integration pipelines with Azure Synapse Pipelines**

- ❖ Describe Azure Synapse Pipelines
- ❖ Perform petabyte-scale ingestion with Azure Synapse Pipelines
- ❖ Perform code-free transformation at scale with Azure Synapse Pipelines
- ❖ Orchestrate data movement and transformation in Azure Synapse Pipelines

## **Support Hybrid Transactional Analytical Processing with Azure Synapse Link**

- ❖ Designing a hybrid transactional and analytical processing using Azure Synapse Analytics
- ❖ Configuring Azure Synapse Link with Cosmos DB
- ❖ Querying Cosmos DB with Apache Spark for Synapse Analytics
- ❖ Copy data from Azure Cosmos DB into a SQL pool using Apache Spark