DP-600 Exam Prep

Skills at a glance

- Plan, implement, and manage a solution for data analytics (10–15%)
- Prepare and serve data (40–45%)
- Implement and manage semantic models (20–25%)
- Explore and analyze data (20–25%)

Plan, implement, and manage a solution for data analytics (10–15%)

Plan a data analytics environment

- Identify requirements for a solution, including components, features, performance, and capacity stock-keeping units (SKUs)
- Recommend settings in the Fabric admin portal
- Choose a data gateway type
- Create a custom Power BI report theme

Implement and manage a data analytics environment

- Implement workspace and item-level access controls for Fabric items
- Implement data sharing for workspaces, warehouses, and lakehouses
- Manage sensitivity labels in semantic models and lakehouses
- Configure Fabric-enabled workspace settings
- Manage Fabric capacity

Manage the analytics development lifecycle

- Implement version control for a workspace
- Create and manage a Power BI Desktop project (.pbip)
- Plan and implement deployment solutions
- Perform impact analysis of downstream dependencies from lakehouses, data warehouses, dataflows, and semantic models
- Deploy and manage semantic models by using the XMLA endpoint

- Create and update reusable assets, including Power BI template (.pbit) files, Power BI data source (.pbids) files, and shared semantic models

Prepare and serve data (40–45%)

Create objects in a lakehouse or warehouse

- Ingest data by using a data pipeline, dataflow, or notebook
- Create and manage shortcuts
- Implement file partitioning for analytics workloads in a lakehouse
- Create views, functions, and stored procedures
- Enrich data by adding new columns or tables

Copy data

- Choose an appropriate method for copying data from a Fabric data source to a lakehouse or warehouse
- Copy data by using a data pipeline, dataflow, or notebook
- Add stored procedures, notebooks, and dataflows to a data pipeline
- Schedule data pipelines
- Schedule dataflows and notebooks

Transform data

- Implement a data cleansing process
- Implement a star schema for a lakehouse or warehouse, including Type 1 and Type 2 slowly changing dimensions
- Implement bridge tables for a lakehouse or a warehouse
- Denormalize data
- Aggregate or de-aggregate data
- Merge or join data
- Identify and resolve duplicate data, missing data, or null values
- Convert data types by using SQL or PySpark
- Filter data

Optimize performance

- Identify and resolve data loading performance bottlenecks in dataflows, notebooks, and SQL queries

- Implement performance improvements in dataflows, notebooks, and SQL queries
- Identify and resolve issues with Delta table file sizes

Implement and manage semantic models (20–25%)

Design and build semantic models

- Choose a storage mode, including Direct Lake
- Identify use cases for DAX Studio and Tabular Editor 2
- Implement a star schema for a semantic model
- Implement relationships, such as bridge tables and many-to-many relationships
- Write calculations that use DAX variables and functions, such as iterators, table filtering, windowing, and information functions
- Implement calculation groups, dynamic strings, and field parameters
- Design and build a large format dataset
- Design and build composite models that include aggregations
- Implement dynamic row-level security and object-level security
- Validate row-level security and object-level security

Optimize enterprise-scale semantic models

- Implement performance improvements in queries and report visuals
- Improve DAX performance by using DAX Studio
- Optimize a semantic model by using Tabular Editor 2
- Implement incremental refresh

Explore and analyze data (20–25%)

Perform exploratory analytics

- Implement descriptive and diagnostic analytics
- Integrate prescriptive and predictive analytics into a visual or report
- Profile data

Query data by using SQL

- Query a lakehouse in Fabric by using SQL queries or the visual query editor

- Query a warehouse in Fabric by using SQL queries or the visual query editor
- Connect to and query datasets by using the XMLA endpoint