

Q1. Explain DAX.

DAX, which stands for Data Analysis Expressions, is a formula language used in Microsoft Power BI, Excel, and other Microsoft products. DAX is designed for data modeling, data analysis, and creating custom calculations in data models. It enables users to perform complex calculations, create custom measures, and define calculated columns within Power BI and Excel.

Q2. Explain datasets, reports, and dashboards and how they relate to each other?

Datasets:

- Datasets in Power BI are collections of data that come from various sources and are used for analysis and visualization. They serve as the foundation of reports and dashboards.
- Datasets can be created by importing data from files (e.g., Excel, CSV), connecting to databases, web services, or using Power Query to transform and model data.
- Power BI allows users to create multiple datasets, each representing different sets of data or tables from various sources.
- Datasets may contain one or more tables, and these tables can have relationships established between them to form a cohesive data model.

Reports:

- Reports are interactive data visualizations created using the data from one or more datasets. They serve as visual representations of the underlying data for analysis and exploration.
- In Power BI, reports are built by dragging and dropping fields from the datasets onto a canvas to create visualizations like charts, tables, maps, and more.
- Reports can have multiple pages or tabs, allowing users to organize related visualizations logically.
- Users can apply filters, slicers, and drill-down options in reports to interactively explore and analyze the data.

Dashboards:

- Dashboards are high-level, consolidated views of essential data insights from one or more reports and datasets.
- In Power BI, dashboards are created by pinning specific visualizations or tiles from reports onto a dashboard canvas.
- Dashboards provide a summary view of key performance indicators (KPIs) and trends, allowing users to monitor critical metrics at a glance.
- Dashboards are designed to offer real-time insights and are often used for monitoring business performance and tracking progress towards goals.

Q3. How reports can be created in power BI, explain two ways with Navigation of each.

There are two ways to create reports in Power BI:

- Quick Reports
- Desktop Reports

Quick Reports are created in the Power BI service. They are a quick and easy way to create a report from a dataset. To create a Quick Report, follow these steps:

1. In the Power BI service, click the Create button.
2. Select Quick Report.
3. Select the dataset that you want to use.
4. Power BI will automatically create a report with a few visualizations.
5. You can then customize the report by adding or removing visualizations, changing the data, and formatting the report.

Desktop Reports are created in Power BI Desktop. They give you more flexibility and control over the creation of your reports. To create a Desktop Report, follow these steps:

1. Download and install Power BI Desktop.
2. Open Power BI Desktop.
3. Click the Get Data button.
4. Select the data source that you want to use.
5. Power BI Desktop will import the data into a model.
6. You can then create visualizations and add them to the report.
7. You can also format the report and publish it to the Power BI service.

Q4. How to connect to data in Power BI? How to use the content pack to connect to google analytics? Mention the steps.

Sure, here are the steps on how to connect to data in Power BI and how to use the content pack to connect to Google Analytics:

Connecting to data in Power BI

1. Open Power BI Desktop.
2. Click the Get Data button.
3. Select the data source that you want to connect to.
4. Power BI will import the data into a model.

Using the content pack to connect to Google Analytics

1. Open Power BI Desktop.
2. Click the Get Data button.
3. Select More.
4. Scroll down and select Google Analytics.
5. Click Connect.
6. Enter your Google Analytics credentials and click Accept.
7. Power BI will import the data from Google Analytics into a model.

Here are the detailed steps on how to use the content pack to connect to Google Analytics:

1. In Power BI Desktop, click Get Data > More.
2. Scroll down and select Google Analytics.
3. Click Connect.
4. In the Sign in to Google Analytics dialog box, enter your Google Analytics credentials and click Accept.

5. In the Select a Google Analytics account dialog box, select the account that you want to connect to and click Next.
6. In the Select a property and view dialog box, select the property and view that you want to connect to and click Next.
7. In the Select the data dialog box, select the data that you want to import and click Import.

Power BI will import the data from Google Analytics into a model. You can then create visualizations and reports based on the data.

Q5. How to import Local files in Power BI? Mention the Steps.

1. Open Power BI Desktop.
2. Click the Get Data button.
3. Select Files.
4. Click Local File.
5. Browse to the file that you want to import and click Open.
6. Power BI will import the data from the file into a model.

Q6. In Power BI visualization, what are Reading View and Editing view?

Reading View:

- Reading View is the default mode when you open a published report or dashboard in the Power BI Service (Power BI Online).
- In Reading View, you can interact with the report or dashboard as an end user, consuming the data visualizations and insights without making any changes to the content.
- In this mode, you can apply filters and slicers, drill down into data, view tooltips, and interact with any interactive elements that the report creator has enabled.
- Reading View allows you to explore and analyze the data presented in the report without altering the underlying report structure or visualizations.

Editing View:

- Editing View is the mode you enter when you are the report author or when you have edit permissions on a report or dashboard.
- In Editing View, you can make changes to the report or dashboard layout, visualizations, data sources, and other aspects of the content.
- In this mode, you have access to the Power BI Service's full set of authoring and editing tools, allowing you to add or modify visuals, create new pages, adjust data transformations, apply themes, and manage data connections.
- Editing View is used for designing and building reports and dashboards or making updates to existing content.