

Power BI Assignment 5

Q1 Explain DAX

DAX stands for "Data Analysis Expressions" is a formula language used in Power BI to define & create custom calculations for data analysis & modelling.

DAX is similar to Excel formulas, but it has some unique features that make it more powerful for data analysis.

Example, DAX supports many-to-many relationships, allows for calculations across different tables, & provides advanced time intelligence functions for analyzing data over time.

Some DAX Functions:-

- | | | |
|------------|--------------|---------|
| 1) SUMX | 2) CALCULATE | 5) DATE |
| 3) AVERAGE | 4) FILTER | |

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

Datasets: A dataset is a collection of data that has been imported or connected to Power BI from various data sources.

It is the foundation of any Power BI report or dashboard.

Reports: A report is a collection of visualizations & charts that are created from the data in a dataset.

Reports are used to visualize data, analyze trends, & gain insights.

Dashboards: A dashboard is a collection of visualizations & charts that provide a high-level view of data from one or more reports.

They are used to monitor key metrics, track progress towards goals, & quickly identify issues or opportunities.

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

Reports can be created in Power BI in 2 ways:
Power BI Desktop & Power BI Service.

(a) Power BI Desktop:

- 1) Open Power BI Desktop & click on "Get Data" button on the Home tab to connect to your data source.
- 2) Select the data source you want to use & follow the prompts to connect to your data.
- 3) Once your data is loaded, use the field pane to drag & drop fields onto the canvas to create your visualizations.
- 4) Customize your visualization using visualization pane & format your report using formatting pane.
- 5) Save your report by clicking the "Save" button in top left corner.

(b) Power BI Service:

- 1) Log in to the Power BI Service & click on "Create" button in left-hand navigation menu.
- 2) Select "Report" from the drop-down menu & choose the data source you want to use.

- 3) Once the data is loaded, use visualization pane to drag & drop fields onto the canvas to create your visualization.
- 4) Customize your visualization using the formatting pane options available in the visualization pane.
- 5) Save your report by clicking on "Save" button in the top right corner.

Q4 How to connect to data in Power BI? How to use the Content pack to connect to Google Analytics? Mention the steps.

* Steps to connect to data in Power BI:-

- 1) Open Power BI Desktop & click on "Get Data" button on Home tab.
- 2) Select the data source you want to connect to from the list of available connectors.
- 3) Enter the necessary details to connect to data source, such as server name, database name & credentials.
- 4) Select the data you want to use from the data source.
- 5) Click on "Load" or "Transform Data" depending on whether you want to load the data directly into a report or perform data transformations first.

* To use the Content Pack to connect to Google Analytics in Power BI:-

- 1) Open Power BI Service & sign in with your account.
- 2) Click on "Get data" in the left-hand navigation pane & select "Services".
- 3) Select "Google Analytics" from the list of available services & click on "Connect".

- 4.) Sign in to your Google Analytics account & grant Power BI access to your data.
- 5.) Select the Google Analytics account & view you want to use.
- 6.) Choose the data you want to import & click on "Load" to load the data into Power BI.

Q5 How to Import Local files in Power BI?
Mention the steps.

- 1.) Open Power BI Desktop.
- 2.) Click on "Get Data" button on Home Tab.
- 3.) In "Get Data" window, select the "file" option from the list of available connectors.
- 4.) Choose the type of file you want to import & click on "Connect".
- 5.) Browse to the location of the file on your computer & select it.
- 6.) If necessary, specify any import options.
- 7.) Preview the data to ensure that it is being imported correctly.
- 8.) Click on "Load" to load the data into Power BI.

Q6 In Power BI visualization, what are Reading view & Editing view?

The Reading view, is the default view of a published report, where end-users can interact with the visualizations & see the insights presented in the report.

The user can filter & highlight data.

The editing view is where report authors & designers create & modify reports.

In editing view one can add new visualizations, rearrange existing ones, apply filters & customize various elements of the report layout & design.