**Power BI Assignment 5**

1. Explain DAX.
2. Explain datasets, reports, and dashboards and how they relate to each other?
3. How reports can be created in power BI, explain two ways with Navigation of each.
4. How to connect to data in Power BI? How to use the content pack to connect to google analytics? Mention the steps.
5. How to import Local files in Power BI? Mention the Steps.
6. In Power BI visualization, what are Reading View and Editing view?

ANSWER

1. \*\*DAX (Data Analysis Expressions):\*\* DAX is a formula language used in Power BI, as well as other Microsoft products like Power Pivot in Excel and SQL Server Analysis Services. It is designed for creating custom calculations and aggregations on data within these tools. DAX allows you to create calculated columns, measures, and calculated tables to perform advanced data modeling and analysis.

2. \*\*Datasets, Reports, and Dashboards in Power BI:\*\*

- \*\*Dataset:\*\* A dataset in Power BI is a collection of data that you import or connect to. It can include data from various sources, such as databases, Excel files, web services, and more. Datasets are used as the foundation for creating reports and dashboards.

- \*\*Reports:\*\* Reports in Power BI are interactive data visualizations created using data from datasets. You can create charts, tables, and other visual elements to represent data. Reports are designed to provide insights and can contain multiple pages or tabs.

- \*\*Dashboards:\*\* Dashboards are a way to display key insights and visualizations from one or more reports in a single view. Dashboards are often used for high-level, at-a-glance monitoring. They allow you to pin visualizations (tiles) from reports onto a single canvas for a consolidated view.

The relationship between these components is hierarchical: a dataset is the basis for creating reports, and multiple reports can be pinned to a dashboard for a consolidated view of important data.

3. \*\*Creating Reports in Power BI:\*\*

- \*\*Using Power BI Desktop:\*\*

1. Open Power BI Desktop.

2. Click on "Get Data" to import or connect to your dataset.

3. Create data visualizations by dragging and dropping fields onto the canvas.

4. Customize visuals, apply filters, and create measures and calculated columns.

5. Save your report and publish it to the Power BI service.

- \*\*Using Power BI Service:\*\*

1. Sign in to the Power BI service (https://app.powerbi.com).

2. Click on "Create" and select "Report."

3. Import or connect to your dataset.

4. Create and customize visualizations using the online report editor.

5. Save your report.

4. \*\*Connecting to Data in Power BI:\*\*

- \*\*Using Content Packs to Connect to Google Analytics:\*\*

1. In Power BI, go to the Power BI service (https://app.powerbi.com).

2. Click "Get Data" on the left-hand side.

3. Under "Services," select "Get" under Google Analytics.

4. Sign in with your Google Analytics credentials.

5. Select the Google Analytics property and view you want to import.

6. Load the data into your dataset.

5. \*\*Importing Local Files in Power BI:\*\*

1. Open Power BI Desktop.

2. Click "Get Data" and choose the data source (e.g., Excel, CSV, Text, etc.).

3. Browse to the local file on your computer.

4. Configure import settings (data transformations, data types, etc.).

5. Load the data into your dataset.

6. \*\*Power BI Visualization:\*\*

- \*\*Reading View:\*\* In the Reading View, you can interact with and explore reports and dashboards. You can apply filters, drill into data, and consume information presented in visualizations. This view is primarily for end-users who want to view and interact with the data.

- \*\*Editing View:\*\* In the Editing View, you have the ability to modify reports and dashboards. This view is used by report authors and designers to create and edit visualizations, add new elements, adjust layouts, create calculated fields, and perform other design-related tasks.