**Assignment-5**

1. Explain DAX.

Ans: The DAX language was created specifically for the handling of data models, through the use of formulas and expressions. DAX is used in several Microsoft Products such as Microsoft Power BI, Microsoft Analysis Services and Microsoft Power Pivot for Excel.

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

Ans. Certainly! In Power BI, **datasets**, **reports**, and **dashboards** are three interconnected components that work together to turn raw data into actionable insights.

* **Datasets**: A dataset is a collection of data that you import or connect to. It’s essentially the raw data that you’ve pulled from various sources, such as Excel spreadsheets, databases, or web services. Datasets can be refreshed to reflect updated data from the source.
* **Reports**: A report is a collection of visualizations that appear together on one or more pages. Reports are created from datasets and are where you can explore your data and discover patterns, trends, and outliers. A single report can be made up of multiple visualizations, such as charts, graphs, maps, and tables.
* **Dashboards**: A dashboard is a single canvas that displays multiple reports and visualizations. It’s a consolidated view that provides at-a-glance insights by bringing together your most important metrics in one place. Dashboards are interactive and can be personalized to focus on the information that matters most to you.

Here’s how they relate to each other:

* You **start with a dataset**, which you use to **create one or more reports**. These reports analyze and visualize the data in various ways.
* From these reports, you can **pin visualizations to a dashboard**. This allows you to create a high-level view of key metrics that you can monitor at a glance.

In essence, **datasets** form the foundation, **reports** provide the analysis, and **dashboards** offer a summarized view, making it easier for end-users to consume and make decisions based on their data.

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

Ans. **Method 1: Using Power BI Desktop**

1. **Open Power BI Desktop**.
2. **Get Data**: Click on the “Home” tab and then select “Get Data”. Choose your data source and connect to it.
3. **Load Data**: Once the data is loaded, it will appear as a new dataset in the “Fields” pane.
4. **Create Visuals**: Go to the “Report” view by clicking on the yellow report icon. Drag fields onto the canvas or into the “Values” area of visualizations like charts or tables.
5. **Design Report**: Arrange your visuals, apply filters, and format your report using the formatting pane.
6. **Save**: Save your report by clicking “File” and then “Save As”.

**Method 2: Using Power BI Service**

1. **Log in to Power BI Service**.
2. **Get Data**: Click on “Get Data” in the bottom-left corner. Choose your data source and connect to it.
3. **Create a New Report**: In your workspace, click on “Create” and select “Report”.
4. **Add Data to Report**: Select the dataset you want to use and click “Create”. The dataset fields will appear on the right side.
5. **Build Visuals**: Click on the visualizations you want to add to your report and drag the desired fields into the value areas.
6. **Arrange and Format**: Customize your report by arranging the visuals and using the formatting options available.
7. **Publish**: Once you’re satisfied with the report, publish it to your workspace by clicking “File” and then “Publish to Power BI”.
8. How to connect to data in Power BI? How to use the content pack to connect to google analytics? Mention the steps.

Ans To connect to a data source, select the data source from the Get Data window and select Connect.

Steps

1. **Sign in to Power BI Service**.
2. In the left navigation pane, click on **“Get Data”**.
3. In the **“Services” box**, click **“Get”**.
4. From the menu of online services, select **“Google Analytics”**.
5. Click **“Connect”**.
6. Enter your **Google Analytics account, property, and view** information that you want to connect to. This information can be found in your Google Analytics account, under the **“Admin”** tab.
7. Authenticate with your Google credentials if prompted.
8. Once connected, Power BI will import your Google Analytics data and create a new dataset.
9. You can then explore your data using the out-of-the-box dashboard and reports provided by the content pack or create your own custom reports and dashboards.
   1. to import Local files in Power BI? Mention the Steps.

To import local files into Power BI, you can follow these steps:

1. **Open Power BI Desktop**.
2. Navigate to the **“Home” tab** and click on **“Get Data”**.
3. Select the type of file you want to import (e.g., Excel, CSV, Text).
4. Browse and choose the specific file or files you want to import.
5. If necessary, configure any additional settings, such as specifying a delimiter for CSV files.
6. Review the data preview and make any necessary adjustments.
7. Click on **“Load”** to import the data into Power BI
   1. In Power BI visualization, what are Reading View and Editing view?

Ans. In Power BI, **Reading View** and **Editing View** are two modes for interacting with reports:

* **Reading View**: This is the default view when you open a report in Power BI Service. It’s designed for business users to consume reports created by others. [In Reading View, you can interact with the report, apply filters, and drill down into data, but you cannot make changes to the report itself1](https://learn.microsoft.com/en-us/power-bi/consumer/end-user-reading-view).
* **Editing View**: This mode is available to report owners and creators, or those with the appropriate permissions in the workspace. Editing View allows you to create and edit reports, add or remove visuals, modify filters, and arrange pages. [Essentially, it provides full control over the report’s design and content2](https://learn.microsoft.com/en-us/power-bi/create-reports/service-interact-with-a-report-in-editing-view).

To switch between these views:

* In **Power BI Service**, you’ll be in Reading View by default. To enter Editing View, you need to click the “Edit” button.
* In **Power BI Desktop**, you work in Report View, which is similar to Editing View in the service, allowing you to create and edit reports.