**Power BI**

**Assignment 5**

1. **Explain DAX.**

Microsoft Power BI uses the scripting language Data Analysis Expressions (DAX) to create calculated columns, measurements, and custom tables. It is a group of operators, constants, and functions that can be utilized in an expression to do calculations and return one or more results.

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

Datasets: It is a collection of data tables. It is derived from sources like excel files, web services, databases, etc. These datasets have structured data. Also include calculated columns and measures created using Data Analysis Expressions (DAX) to enhance the data for analysis.

Report: is a visual representation of data from one or more datasets. Reports consist of one or multiple pages, each containing visuals like charts, tables, graphs, maps, etc.

Users can modify the reports. It has features filters, slicers, and drill-through capabilities to have more command of data.

Dashboard: Whatever data we have input in the system is displayed on the dashboard we have created. It is most interactive to the user so that all information will be displayed as per the requirements.

Relationship Between Datasets, Reports, and Dashboards:

These all terms are interrelated. Based on the datasets we can create reports and since the reports we have we are able to create dashboards. You can have multiple reports based on a single dataset.

1. **How reports can be created in power BI, explain two ways with Navigation of each.**
2. Power BI Desktop:

* Import Data
* Create Visuals
* Build Interactivity
* Design Pages and Layout
* Save the Report

1. Power BI Service (Web):

* Upload Dataset
* Create Visuals
* Add Interactivity
* Design Layout
* Save and Share the Report

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

**Steps to follow:**

* Open Power BI Desktop
* Get Data
* Select Data Source
* Choose a Data Source
* Connect to Web
* Enter the URL
* Connect
* Authentication
* Data Loading
* Transform Data
* Load Data
* Create Visuals

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

* Open Power BI Desktop
* Get Data
* Select Data Source
* Choose File Source
* Browse for the File
* Select the File
* Configure Import Settings
* Load Data
* Create Visuals
* Save

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

Reading View: end-users typically see when they interact with a published Power BI report or dashboard. Interacting with visuals is more in reading view. Users can use slicers and filter controls to customize the data they see in the report. Users have the option to export data to Excel or other formats.

Editing View: It is the workspace in Power BI Desktop where report authors and designers create, modify, and fine-tune reports and dashboards. We have full control over the design, layout, and functionality of our report. We can create and customize data visualizations, add charts, tables, maps, and other elements to your report, relationships between tables, create calculated columns and measures using DAX, Page layout we can edit. We have advanced formatting options, themes, and custom visuals.