**Power BI Assignment 5**

1. **Explain DAX.**

DAX stands for Data Analysis Expressions. It is a formula language that is used in Power BI to create calculated columns, measures, and custom tables. DAX is a powerful language that can be used to perform a wide range of calculations, including:

**Aggregations:** DAX can be used to calculate aggregated values, such as sums, averages, and counts.

**Conditional logic:** DAX can be used to create conditional expressions, such as IF statements and CASE statements.

**Time intelligence:** DAX includes several functions that can be used to perform calculations based on time, such as YTD, MTD, and previous year.

**Mathematical functions:** DAX includes several mathematical functions, such as SIN, COS, and SQRT.

**Statistical functions:** DAX includes several statistical functions, such as COUNT, AVERAGE, and VAR.

DAX formulas are entered into the formula bar in Power BI. The formula bar is located at the top of the Power BI window. When you enter a DAX formula, Power BI will provide syntax highlighting and error checking to help you write correct formulas.

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

In Power BI, a dataset is a collection of data that is used to create reports and dashboards. A report is a visual representation of data that is used to tell a story. A dashboard is a collection of reports that are used to monitor and track performance.

The relationship between datasets, reports, and dashboards is as follows:

**Datasets are the foundation of Power BI.** They store the data that is used to create reports and dashboards.

**Reports are created from datasets.** They use the data in the dataset to create visualizations, such as charts, tables, and maps.

**Dashboards are collections of reports.** They are used to monitor and track performance by providing a single view of data from multiple reports.

For example, you could create a dataset that contains data about your company's sales. You could then create a report that visualizes the sales data by product category. You could also create a dashboard that includes the sales report as well as other reports that show the company's revenue, expenses, and profit.

The relationship between datasets, reports, and dashboards is important because it allows you to organize and visualize your data in a way that is easy to understand and use. By understanding the relationship between these three components, you can create reports and dashboards that are effective and informative.

1. **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:

**Using Power BI Desktop:** Power BI Desktop is a free tool that you can use to connect to data sources, create reports, and publish them to the Power BI service.

**Using the Power BI service:** The Power BI service is a cloud-based platform that you can use to create reports, dashboards, and collaborate with others.

Here are the steps on how to create a report in Power BI Desktop:

* Open Power BI Desktop.
* Click Get Data.
* Select the data source that you want to connect to.
* Import the data into Power BI Desktop.
* Create a report by adding visualizations to the canvas.
* Publish the report to the Power BI service.

Here are the steps on how to create a report in the Power BI service:

* Go to the Power BI service website.
* Sign in to your account.
* Click Create.
* Select Report.
* Select the data source that you want to connect to.
* Import the data into the Power BI service.
* Create a report by adding visualizations to the canvas.
* Publish the report to the Power BI service.

Here is the navigation of each way:

**Power BI Desktop:** The navigation in Power BI Desktop is based on the ribbon. The ribbon contains several tabs that allow you to access different features of Power BI Desktop.

**Power BI service:** The navigation in the Power BI service is based on the left-hand pane. The left-hand pane contains several links that allow you to access different features of the Power BI service.

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

There are several ways to connect to data in Power BI. Here are some of the most common ways:

**Using the Get Data wizard:** The Get Data wizard is a tool that helps you connect to a wide range of data sources, including Excel spreadsheets, SQL Server databases, and cloud-based data sources.

**Using the Data connector gallery:** The Data connector gallery is a library of pre-built data connectors that you can use to connect to a wide range of data sources.

**Using the Direct Query mode:** Direct Query mode allows you to connect to a live data source and query the data directly from the source.

**Using the Import mode:** Import mode allows you to import data from a data source into Power BI Desktop.

To use the content pack to connect to Google Analytics, you can follow these steps:

* Open Power BI Desktop.
* Click Get Data.
* In the Get Data dialog box, select Google Analytics.
* Sign into your Google Analytics account.
* Select the view that you want to connect to.
* Click Connect.

Once you have connected to Google Analytics, you will see a list of the data that is available in your view. You can then create reports and dashboards by adding visualizations to the canvas.

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

Below are the steps on how to import local files in Power BI:

* Open Power BI Desktop.
* Click Get Data.
* In the Get Data dialog box, select Files.
* Click Local File.
* Browse to the file that you want to import.
* Click Open.

Once you have imported the file, you will see a list of the data that is available in the file. You can then create reports and dashboards by adding visualizations to the canvas.

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

In Power BI visualization, Reading View and Editing View are two different modes that you can use to interact with reports.

**Reading View** is the default mode for reports. In Reading View, you can view the report and interact with the visualizations, but you cannot make any changes to the report.

**Editing View** allows you to make changes to the report, such as adding or removing visualizations, changing the data that is displayed, and formatting the report.

To switch between Reading View and Editing View, you can click the Edit button in the toolbar.