Power BI Assignment 5

1. **DAX**: DAX is a collection of functions, operators, and constants that can be used in a formula, or expression, to calculate and return one or more values. Stated more simply, DAX helps you create new information from data already in your model. In Power BI, you can use different function types to analyze data, and create new columns and measures. It includes functions from different categories such as −
   - Aggregate
   - Text
   - Date
   - Logical
   - Counting
   - Information

2. **Datasets**: A Power BI Dataset is a series of Power Query queries that have been shaped in a DAX model. Each dataset can combine different files, database tables and online services all into one tabular model.

   Reports: A power BI report is a series of visualizations, filters and static elements on a canvas. Power BI reports are saved as a single PBIX file and connect to a single dataset. A Power BI dataset can have many data sources. Each report can have multiple sheets, just like an Excel workbook. Reports can be a presentation of corresponding charts and other visualizations, or they can be a large set of charts and visualizations that may or may not directly relate. A report is meant to be used to gather detailed intelligence on the operations within an organization, thus a report can be either very broadly covering a wide scope of related information, or narrowly focusing on details of a single item, purpose, or event.

   Dashboards: In Power BI, dashboards are a way of pulling together visualizations from various reports. All dashboards should revolve around answering a central question. For example, a Chief Executive might simply want to know, at any given time, in up to the minute detail, "How is the business doing?". The answer to that question is as complex as the organizational structure of the company, but it is probably very simply measured with around 10 metrics or numbers. Those 10 numbers can likely be analyzed in around 10 charts, and many of these numbers can and should be combined into one chart, when the numbers are relatable or are on a similar scale. All these things should be considered when building a dashboard.

   In the Power BI service, reports are built on datasets, report visuals are pinned to dashboards, and dashboard visuals link back to reports. A Report is much longer than a dashboard. Not only in the amount of detail, but also visually. Tables and charts that live within a report can take up many pages of a printed medium, and can even be books or many volumes of books. In the electronic mediums, a report will likely require the reader to scroll through many screens or click from page to page.

3. Following are the ways by which reports can be created in power BI:

a) Create a quick report: In the navigation pane in the Power BI service, you can select the Create button that opens a page where you can select your data source. It's also accessible from the new report button on Home. When you choose to paste or manually enter data, a grid appears that you can type into. You can also paste data by using Ctrl + V or the context menu.

b) Create a report quickly from a SharePoint list or library: There's a new way to create reports quickly from data in SharePoint lists or libraries. Power BI automatically generates the visuals for you. Microsoft List and SharePoint list or library users can explore their data with just a few clicks. In a SharePoint list or library, select Integrate > Power BI > Visualize the list or visualize the library. A new browser tab opens with an automatically generated report showing interesting insights based on your data.

4. With Power BI Desktop, you can connect to many different types of data. These sources include basic data sources, such as a Microsoft Excel file. You can connect to online services that contain all sorts of data, such as Salesforce, Microsoft Dynamics, Azure Blob Storage, and many more.
To connect to data, from the home ribbon select Get data. The Get Data window appears. You can choose from the many different data sources to which Power BI Desktop can connect.

To connect to Google Analytics data:

I. Select Get Data from the Home ribbon in Power BI Desktop. Select Online Services from the categories on the left, and then select Google Analytics. Then select Connect.
II. If this is the first time you're getting data through the Google Analytics connector, a third-party notice is displayed. Select Don't warn me again with this connector if you don't want this message to be displayed again. Then select Continue.
III. To sign in to your Google Analytics account, select Sign in.
IV. In the Sign in with Google window that appears, provide your credentials to sign in to your Google Analytics account. You can either supply an email address or phone number. Then select Next.
V. Enter your Google Analytics password and select Next.
VI. When asked if you want Power BI Desktop to access your Google account, select Allow.
VII. Once you've successfully signed in, select Connect.

Once the connection is established, you'll see a list of the accounts you have access to. Drill through the account, properties, and views to see a selection of values, categorized in display folders.

5. Following are the steps to to import Local files in Power BI:

- In Power BI, click Get Data in the lower left screen.
- Under Import or Connect to Data > Files, click Get.
- Click Local File.
- Choose which file to upload and click Open.
- Click Upload under Upload your Excel file to Power BI.
- The message "Your file has been uploaded" should appear.

6. The Power BI service has two different modes for interacting with reports: Reading view for report business users and Editing view for report owners and creators. If you are a business user, then you are more likely to use Reading view to consume reports created by others. Editing view is used by report designers, who create the reports and share them with you. Reading view is your way to explore and interact with reports created by colleagues.

Most reports open in Reading view. To switch from Reading view to Editing view, select Edit from the action bar. If Edit is grayed out, that means that you don't have permissions to edit the report. To switch back to Reading view, select Reading view from the action bar.