POWER BI ASSIGNMENT-5 SOLUTIONS

1. It is a formula expression language called (DAX) that can be used with various visualization tools like Power BI. It is also known as a functional language, where the full code is kept inside a function. Available Data types of Dax are: 1) Numeric, 2) Boolean, 3) DateTime, 4) String and 5) Decimal. Some important and widely used DAX functions are Sum, Max, AVG, Distinct, Count, Calculate, Datediff functions.

2. **Dataset:** It is a collection of data that you import or connect to. Power BI lets you connect to and import all sorts of datasets and bring all of it together in one place for analysis.

    Reports: A Power BI report is one or more pages of visualizations such as line charts, maps, and treemaps. Visualizations are also called visuals. All of the visualizations in a report come from a single dataset.

    Dashboard: It is a single canvas that contains zero or more tiles and widgets. Each tile pinned from a report or from Q&A displays a single visualization that was created from a dataset and pinned to the dashboard. Entire report pages can also be pinned to a dashboard as a single tile. It can be created and shared in Power BI service with others.

    Dashboards are created using reports and reports are created from the datasets. That's how they are related to each other.

3. Reports can be created in Power BI in two ways:
    I.   **Using Power BI Desktop Tool:** In this way of creating Power BI Report, Power BI Desktop must be installed on PC. The following steps can be followed to create reports using the Power BI Desktop Tool:
        Step 1: Load the Dataset
        Step 2: Querying Data onto the Navigator
        Step 3: Editing the Queries on the Table
        Step 4: Shaping the Data According to Requirements
        Step 5: Merging Queries from Different Tables
        Step 6: Drag & Drop Visuals in report canvas as per requirements & select data in rightmost pane to be used in particular visuals.
    II. **Using Power BI Web Tool:** The Power BI Web Tool enables to directly import the data source onto Power BI on the web and automatically generate the report. The following steps can be followed to create reports using this method:
        Step 1: Select Data Source
        Step 2: Select the Data Types for Attributes
        Step 3: Summarize Data Source using Create Flow
        Step 4: Edit Fields using the Summarize Pane

4. To connect to data in Power BI:
        Step 1: From the Home ribbon select Get data
        Step 2: The Get Data window appears. It shows a list of many data sources to which Power BI can connect to.
        Step 3: Select required data source from that list and then provide connection details for data.

    A content pack is a feature that can be accessed in the pro or premium version of Power BI. To connect to google analytics using content pack:
        Step 1: In the left navigation pane, click Get Data.
        Step 2: In the Services box, click Get.
        Step 3: From the menu of online services, select Google Analytics, and then click Connect.

Step 4: Enter the Google Analytics account, property, and view that it is required to be connected. Then sign in with Google Analytics credentials.

Step 5: To permit Power BI to connect to Google Analytics, click Accept.

Step 6: When the import process completes, a new dashboard, report, and model in the Navigation Pane is created.

Step 7: Select the dashboard to view imported data.

5. In Power BI, we can import data and reports from three types of files: 1) Microsoft Excel (.xlsx or .xlsm), 2) Power BI Desktop (.pbix), 3) Comma Separated Value (.csv)

   To import an Excel workbook into Power BI Desktop:

   i. select File > Import > Power Query, Power Pivot.
   ii. Import Excel workbook
   iii. From the Open window, select an Excel workbook to import.
   iv. From the import dialog box that appears, select Start.
   v. After the import is finished, a summary page appears that describes the items that were converted, and also lists any items that couldn't be imported.
   vi. Select Close.
   vii. Power BI Desktop imports the Excel workbook and loads a report based on the workbook contents.

6. There are two modes for interacting with reports in the Power BI service: Editing view and Reading view.

   Business users 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 among collaborators.

   Reading view is the way to explore and interact with reports created by colleagues. Even in Reading view, the content isn't static. We can dig in, looking for trends, insights, and other business intelligence. Slice and dice the content, and even ask it questions using our own words.