Power BI Assignment 5

1.Explain DAX.

ANS: Data Analysis Expressions (DAX) is a formula expression language. 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.

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

ANS: A dataset is a structured collection of data generally associated with a unique body of work. Reports are informative texts that aim to analyse different topics with a specific purpose and audience in mind. A dashboard is a way of displaying various types of visual data in one place. Usually, a dashboard is intended to convey different, but related information in an easy-to-digest form.

Dashboards are created from multiple datasets or reports. Dashboards always concentrate on building insights into the data by using graphs, attractive visuals, charts, etc. Reports are not concentrated on the visualization part of the data rather it looks to create summary pages.

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

ANS: Power BI Report Design is a pivotal process that helps companies design accurate reports by unifying data from multiple sources and gain valuable insights from their customers.

Power BI Report Design can be performed in 2 simple methods. One is by connecting to their data sources on the Power BI Desktop and the other is by copying their data sources into Power BI directly on the web. As Power BI is part of the Microsoft Power Platform, it can easily integrate with other Microsoft technologies and constantly provide you with high-quality reports every step of the way.

Method 1: Creating Reports using the Power BI Desktop Tool

Step 1: Integrating your Data Source with Power Query

In this Power BI Report Design method, you will import your data and process it further using Power Query. You can connect to your data source by selecting the Home tab on the ribbon and then selecting Get Data. Select Get Data > Web. The Web data source dialog box appears. Paste the URL of the Web data source

Step 2: Querying Data onto the Navigator

When you click on “OK”, the Query functionality of the Power BI Desktop tool starts the execution process and brings up the Navigator window.

Step 3: Editing the Queries on the Table

This method of Power BI Report Design also allows you to modify the queries before loading the table onto Power BI Desktop. If you want to do this select the “Transform Data” option on the bottom page. In case you want to load the data without editing, click on “Load”.

When you select Transform data, Power Query Editor starts, and a representative view of the table is shown. The Query Settings pane appears where you can connect to multiple data sources.

Step 4: Shaping the Data According to your Requirements

When you shape data in Power Query Editor, you provide step-by-step instructions to the editor to adjust the data as per your business requirements. The original data source isn’t affected. Only the data associated with this particular view will be adjusted or shaped.

The steps are carefully recorded under the Applied Steps section in the Power Query Settings Pane and the Power BI Desktop tool replicates the steps whenever the queries get executed.

Step 5: Merging Queries from Different Tables

In this Power BI Report Design method, you can combine different tables from multiple data sources into a single table too. You need to import the table just like you saw in Step 2 and shape it if required.

To unify tables, you can merge the queries to make them easier for processing. To merge queries, you need to select the query you want to merge first. Next,

select the query which will have this merged query. Then, click on the Home tab on the ribbon, and select “Merge Queries”. Next, the Merge dialog box appears and you need to select the tables and columns to merge into the selected table. Once you select the tables you want to merge, click on the “OK” button.

Step 6: Loading the Report onto the Power BI Desktop

Now that the report is ready you need to load it onto the Power BI Desktop. You need to apply all the changes and save them. You can do this by replicating all changes in Power BI Desktop and selecting the “Close & Apply” on the Home tab on the ribbon.

Method 2: Creating Reports using the Power BI Web Tool

Step 1: Selecting your Data Source

Once you open Power BI on the web, you need to go to the left navigation pane and click on the “Create” button. This helps you to choose your data source. When you choose to type or paste data, you’ll get a grid that you can start to type into or paste with Ctrl-V on the context menu.

Step 2: Selecting the Data Types for Attributes

In this Power BI Report Design method, Power BI will automatically detect the data types, but you have the option to manually set them using the data type button to the left of the column name.

Step 3: Summarizing your Data Source using Create Flow

The Power BI Web Tool enables you to create a new data set and automatically generates a summarized version of the data using Create Flow. This helps you transform raw data into valuable insights within a matter of a few clicks.

Step 4: Editing Fields using the Summarize Pane

In this Power BI Report Design method, you can make reports as per your needs by editing them easily. In case you want to edit your report by adding or deleting columns, you can do that easily using the Summarize Pane feature supported by Power BI. To do this, simply select and unselect the fields you want to update, what you want to measure and analyse by, and you’ll see charts automatically added or removed to show all combinations.

4.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 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.

In Power BI, it's straightforward to connect to the Google Analytics content pack.

1. In the left navigation pane, click Get Data.
2. In the Services box, click Get.
3. From the menu of online services, select Google Analytics, and then click Connect.
4. Enter the Google Analytics account, property, and view that you want to connect to. Then sign in with your Google Analytics credentials.
5. To permit Power BI to connect to Google Analytics, click Accept.
6. When the import process completes, you will see a new dashboard, report, and model in the Navigation Pane. Select the dashboard to view your imported data.

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

ANS:

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

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

ANS: 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. You need a Power BI Pro or Premium Per User (PPU) license to share reports and to edit 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.