1) Explain DAX.

Ans

DAX stands for Data Analysis Expressions, it is language developed by Microsoft to interact with data in a variety of their platforms like Power BI, PowerPivot and SSAS tabular models. It is designed to be simple and easy to learn while exposing the power and flexibility of tabular models. In a way, you could compare it with Excel formulas on steroids. Using DAX will truly unleash the capabilities of Power BI.

Learning DAX as a Power BI user is much like being an Excel user and discovering how to use formulas, You were able to structure your tables, add some charts and click the sum/average/... button (Σ) but suddenly you discover the world of VLOOKUP, IF functions and whatnot. However, this comparison is not completely valid since, or at least in my opinion, Power BI is already an incredibly powerful tool even without DAX, as in contrast, anything beyond light use in Excel already requires formulas. That being said, learning DAX will open up a new world of Power BI for you. The most import feature you will unlock is being able to select, join, filter, data in a dynamic way. This means that the dashboard can take input from the users and use it to dynamically generate calculated columns, measures and tables.

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

Ans

Dataset

A data set (or dataset) is a collection of data. In the case of tabular data, a data set corresponds to one or more database tables, where every column of a table represents a particular variable, and each row corresponds to a given record of the data set in question. The data set lists values for each of the variables, such as for example height and weight of an object, for each member of the data set. Data sets can also consist of a collection of documents or files.[1]

Reports

A Power BI report is a multi-perspective view into a dataset, with visuals that represent different findings and insights from that dataset. A report can have a single visual or pages full of visuals

Dashboard

A Power BI dashboard is a single page, often called a canvas, that tells a story through visualizations. Because it's limited to one page, a well-designed dashboard contains only the highlights of that story. Readers can view related reports for the details. Dashboards are a feature of the Power BI service only.

Relation between dataset ,report and dashboard

With the help of data sets you are able to create visuals in power bi combining this visuals in single page creates a dashboard and when you combine dashboards together it is called a report.

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

Ans

Method 1

Instead of downloading the Power BI Desktop app and importing the data, you can paste data straight into Power BI on the web, and Power BI automatically generates reports for you.

Method 2 (From excel file)

Steps

- a) Import the Excel file
- b) In the navigation pane, select My Workspace.
- c) From the bottom of the nav pane, select **Get data**.
- d) Select **Files** and navigate to the location where you saved the Retail Analysis sample.
- e) For this exercise, select **Import**.
- f) Select Open.
- g) Select More options (...) next to the dataset, and select Create report.
- h) The report editor opens.
- i) Then add the visualizations like donut chart ,bar graph ,area chart ,line chart, tables, matrix etc as per requirement your report is created.

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

To connect to data in power bi use following Steps

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 Google Analytics follow these steps:

In Power BI Desktop, select Get data from the Home ribbon tab.

In the Get Data window, select Online Services from the categories in the left pane.

Select Google Analytics from the selections in the right pane.

At the bottom of the window, select Connect.

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

Ans

Steps

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

Ans

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

Even in Reading view, the content isn't static. You can dig in, looking for trends, insights, and other business intelligence. Slice and dice the content, and even ask it questions using your own words. Or, sit back and let your data discover interesting insights for you; send you alerts when data changes, and email reports to you on a schedule you set. All your data, any time, in the cloud or on-premises, from any device