**Power BI Assignment 5**

1. Explain DAX.

Answer: DAX is Data Analysis expression which is programming language used in PowerBi to create calculated columns, measures and table. It is a collection of functions, operators and constants used in formula and expression to calculate or return the values.

There are some DAX functions which are as follows;

* Aggregate- Min, Max, Average, Sum, Sumx, Count , Distinctcount
* Text- Replace, Search, Concatenate, Upper
* Logical- And, Or, Not, If, Iferror
* Time intelligence – Edate, Eomonth, Datediff, Now, Today, Hour, Second
* Filter- Calculate, Filter

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

Answer:

Datasets: Dataset is a collection of data that you import or connect to. Power Bi allows you to connect to and import all sorts of datasets and bring all it together in one place. Datasets can also be source data from dataflows. Datasets are also associated with workspaces and a single dataset can be partr of many workspaces. When we open a workspace, the associated datasets are listed under the datasets tab. Each listed dataset is source of data available for one or more reports and dataset can contain data that comes from one or more sources.

Report: Report in PowerBi is one or more pages of visualization such as line charts, maps and treemaps etc. All of visualizations in a report come from a single dataset. Reports can be created from scratch by you and can be shared with you directly I workspace. Sometimes, PowerBi create the reports for you when you connect to datasets. Foe example: when you connect to SaaS application, Power Bi imports a pre-built report.

Dashboard: Dashboard 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.

A dashboard is associated with a single workspace. It can display visualizations from many different datasets. It can display visualizations from different reports as well. It can display visualization pinned from other tools. There is a related content pane in power Bi which shows how datasets, reports and dashboards are related. This pane allows you to take action on the content and easily navigate between the related content.

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

Answer: In Power Bi Desktop, First Load your data Via Get data Under Ribbon Home with data Source. If data is not cleaned , use Transform data instead of load.

Once the data is successfully loaded. It will appear on Data in right side and can be viewed in data View from left.

Making report from loaded data:

* Choose visual from visualization pane in Right side. For example: I selected line chart, we need to choose right column for x-axis and y-axis. Also we can format the line table on clicking FORMAT YOUR VISUAL which give you two things visual and general to format the the line chart.
* We can add more visuals like card, slicers and maps and charts according to our requirements and format them the same way.
* The background of report can also be formatted by clicking on empty source and clicking on format your report page gives you wide option to decorate it. We can add an image at background as well.

Other easier way of creating report is:

* When we have loaded data and we are on empty canvas, Double click over there , Question and answer menu will pop up . we can ask question regarding data, for example: if I type sales , region pie chart. It will create the desired pie chart with no time with formatting. We can change the format according to our requirement in visualization. This is much more coinvent to create a report in short time.

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

Answer: To connect to data in Power Bi: From Home Ribbon, Select Get data. Get data windows will appear, You can choose from many different data sources to which Power Bi desktop can connect. For example: If we want to load CSV file we can choose that option and get the csv file and connect. Power Bi prompts you to provide the location of file to which to connect. Select the file and click on open. Power Bi load the data and show the contents of file in Navigator window. In this window , we can choose which data we want to load. Once data is selected, Click on load to import the data in Power Bi. If data is not cleansed, we can use Transform data option instead of load.

Power Bi services offer a suite of content packs which include pre-built dashboards and reports that will ignite your data.

Steps to connect the content pack to google analysis:

* In left navigation pane, click get data
* In service box, click get
* From the menu of online services, Select Google Analytics and then click on connect.
* Enter the Google Analytics account, property, and the view that you want to connect to, Then sign in with your google analytics credentials.
* To permit Power Bi to connect to Google Analytic and click accept.
* When the import process completes , you will see a new dashboard , report and a model in navigation pane, select the dashboard to view your imported data.

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

Answer:

* 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

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

Answer : There are two modes for interacting with reports in Power Bi.

* Editing View
* Reading View

If you are a business user, then you are most likely to use reading view to consume the report created by others.

Editing view is used by report designers who create the reports and share them with you.

Most reports open in reading view. To switch from reading view to editing view, select Edit from the action bar. If edit is greyed out, that means you do not have permissions to edit the reports. To switch back to reading view, Select reading view from action bar.