**Power BI Assignment 3**

1. List and explain different Power BI products?

The power BI products are Data Source, Power BI Desktop, Power BI service, Power BI report Server, Power BI Mobile, Power BI Pro, Power BI premium, Power BI embedded.

**Data Source**

An important component of Power BI is its vast range of data sources. You can import data from files in your system, cloud-based online data sources or connect directly to live connections. If you import from data on-premises or online services, there is a limit of 1 GB. Some commonly used data sources in Power BI are Excel, text/CSV, XML, etc

**Power BI Desktop**

Microsoft Power BI Desktop is a companion desktop application to Power BI. With Power BI Desktop, you can get data or import data from different data source. Afterwards you can clean the data, analysis and create reports and visualizations. It enables you Create relationships and enrich your data model with new measures and data formats when you import two or more tables, oftentimes you'll need to create relationships between those tables. The Power BI Desktop includes the Manage Relationships dialog and the Relationships view, where you can use Autodetect to let the Power BI Desktop find and create any relationships, or you can create them yourself. You can also very easily create your own measures and calculations or customize data formats and categories to enrich your data for additional insights. It has three views which are the report view, data view and your modelling view and you canvass area where you create your visuals and dash boards. It can enable you save your reports or visuals on file and publish the reports on Power BI Service real time access to other ushers.

**Power BI Service**

Power BI Service is a web-based platform from where you can*share reports made on Power BI Desktop, collaborate with other users, and create dashboards.*

It is available in three versions: free, Pro and premium version.

Power BI Service is also known as, **“Power BI.com”**,**“Power BI Workspace”,** **“Power BI Site”** and **“Power BI Web Portal”**. This component also offers advanced features like *natural language Q&A* and *alerts*.

**Power BI Report Server**

The Power BI Report Server is similar to the Power BI Service. The only difference between these two is that Power BI Report Server is an on-premises platform. It is used by organizations who do not want to publish

their reports on the cloud and are concerned about the security of their data.

Power BI Report Server enables you to create dashboards and share your reports with other users following proper security protocols. To use this service, you need to have a Power BI Premium license.

**Power BI Gateway**

This component is used to connect and access on-premises data in secured networks. Power BI Gateways are generally used in organizations where data is kept in security and watch. Gateways help to extract out such data through secure channels to Power BI platforms for analysis and reporting.

**Power BI Mobile**

Power BI Mobile is a native Power BI application that runs on iOS, Android, and Windows mobile devices. For viewing reports and dashboards, these applications are used.

**Power BI Embedded**

Power BI Embedded offers APIs which are used to embed visuals into custom applications.

1. What limitations of Excel, Microsoft solved by Power Bi?

Power BI can connect to a large number of data sources, while Excel's connectivity capacity is limited. Also, unlike Excel, Power BI can be easily used from mobile devices. Power BI has faster processing than Excel. Power BI dashboards are more visually appealing, interactive and customizable than those in Excel. Row level ssecurity features.

1. Explain PowerQuery?

The Power Query Editor is the primary data preparation experience, where you can connect to a wide range of data sources and apply hundreds of different data transformations by previewing data and selecting transformations from the UI.it is often use to manipulate data ,clean data to gate meaningful insight before visualization.

1. Explain PowerMap?

A power map lets you discover insights you might not see in traditional two-dimensional (2-D) tables and charts. With Power Map, you can plot geographic and temporal data on a 3-D globe or custom map, show it over time, and create visual tours you can share with other people

1. How power BI eliminated the need to host SharePoint Server on premises?

* Microsoft's SharePoint is an Intranet solution that enables users to share and manage content, knowledge, and applications to empower teamwork, quickly find information, and collaborate across the organization. Microsoft Power BI has better pricing, better features in the
* Power BI has a very cool feature which displays all document libraries which exist in the Power BI Site while SharePoint , the Power Pivot Gallery is a single document library.

1. Explain the updates done in Power BI Service (power BI 2.0) as compared to older version ?

### Reporting

* New switcher layout
* New bubble range scaling setting
* On-object interactions

### Modeling

* Updates to ORDER BY function

### Data connectivity

* New modern data connectivity and discovery experience in dataflows
* Lake houses (connector update)

### Visuals

* Many new and updated visuals