**ASSIGNMENT -3**

**QUESTIONS:**

1. List and explain different PowerBi products?

1. What limitations of Excel, Microsoft solved by PowerBi?

1. Explain PowerQuery?

1. Explain PowerMap?

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

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

**ANSWERS:**

**ANSWER-1**. Different Power BI Products:

- Power BI Desktop: This is a free application for Windows that allows users to create interactive reports and dashboards. It includes features for data modeling, visualization, and report building.

- Power BI Service: This is a cloud-based platform where users can publish, share, and collaborate on Power BI reports and dashboards. It includes features for sharing, collaboration, and administration.

- Power BI Mobile Apps: These are mobile applications available for iOS, Android, and Windows devices. Users can view and interact with Power BI reports and dashboards on their mobile devices.

- Power BI Report Server: This is an on-premises report server that allows organizations to host and manage their Power BI reports and dashboards within their own infrastructure.

**ANSWER-2**. Limitations of Excel solved by Power BI:

- Scalability: Power BI can handle much larger datasets compared to Excel.

- Data Refresh: Power BI offers more robust and automated data refresh capabilities.

- Visualization: Power BI provides a wider range of interactive visualization options.

- Collaboration: Power BI Service allows for easy sharing and collaboration on reports and dashboards.

**ANSWER-3.** Power Query:

- Power Query is a data connectivity and data preparation tool that allows users to connect, transform, and clean data from various sources.

- It provides a user-friendly interface for performing data transformation tasks such as filtering, sorting, merging, and grouping.

- Power Query is integrated into Power BI Desktop and Excel, allowing users to easily import and transform data before creating reports and dashboards.

**ANSWER-4**. Power Map:

- Power Map is a 3D data visualization tool available in Excel (part of the Power BI suite).

- It allows users to plot geographic and temporal data on a 3D map, enabling interactive exploration and analysis of spatial data.

- Users can create visualizations such as heat maps, column charts, and bubble maps to visualize their data in a spatial context.

**ANSWER-5.** Elimination of the need to host SharePoint Server on-premises:

- With Power BI Service, organizations can publish and share Power BI reports and dashboards directly from the cloud, eliminating the need for on-premises SharePoint Server.

- Power BI Service provides a secure and scalable cloud-based platform for sharing and collaborating on reports and dashboards, accessible from any device with an internet connection.

**ANSWER-6.** Updates in Power BI Service (Power BI 2.0) compared to older versions:

- Enhanced Collaboration: Improved sharing and collaboration features, including the ability to co-author reports and dashboards in real-time.

- Advanced Analytics: Integration with Azure Machine Learning and other advanced analytics tools for predictive analytics and machine learning.

- Hybrid Deployment Options: Support for hybrid deployment scenarios, allowing organizations to mix on-premises and cloud-based data sources.

- Improved Performance and Scalability: Optimizations to improve performance and scalability, enabling users to work with larger datasets and more complex reports.