**Power BI Assignment 3**

1.List and explain different PowerBi products?

Power BI Desktop: A free desktop application for data analysis and visualization. It allows users to connect to various data sources, create data models, design reports, and publish them to the Power BI Service.

Power BI Service: A cloud-based platform for sharing, collaborating, and managing Power BI reports and dashboards. It enables users to publish reports, schedule data refreshes, and share insights with stakeholders.

Power BI Mobile Apps: Mobile applications available for iOS, Android, and Windows devices, allowing users to access and interact with Power BI reports and dashboards on the go.

Power BI Report Server: An on-premises report server for hosting and managing Power BI reports within an organization's network. It provides capabilities similar to the Power BI Service but is deployed locally.

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

Scalability: Excel has limitations in handling large datasets and complex calculations, whereas Power BI can handle much larger volumes of data and perform advanced analytics.

Data Connectivity: Excel has limited connectivity options compared to Power BI, which supports a wide range of data sources including cloud services, databases, and web APIs.

Data Modeling: Excel's data modeling capabilities are limited, whereas Power BI offers robust data modeling features including relationships, calculations, and measures.

Visualization: Excel's visualization options are basic compared to Power BI's rich and interactive visualizations, which allow for more compelling data presentations.

3.Explain PowerQuery?

Power Query is a data connectivity and preparation tool in Power BI that allows users to discover, connect, and transform data from various sources. It provides a graphical interface for performing data transformations such as filtering, sorting, merging, and pivoting, without the need for complex coding. Power Query helps users clean and shape data before loading it into Power BI for analysis and visualization.

4.Explain PowerMap?

Power Map is a 3D data visualization tool in Power BI that allows users to create interactive maps, tours, and visualizations of geographic and temporal data. It enables users to plot data points on maps, visualize changes over time, and create cinematic tours to tell stories with their data. Power Map enhances data exploration and analysis by providing a visual representation of spatial relationships and trends.

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

Power BI eliminates the need to host SharePoint Server on-premises by providing a cloud-based platform for sharing and collaborating on reports and dashboards. With Power BI Service, users can publish reports directly to the cloud, where they can be accessed and shared securely from anywhere, without the need for on-premises infrastructure or SharePoint Server licensing.

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

Enhanced Collaboration: Improved collaboration features such as commenting, sharing, and @mentions for better communication and teamwork.

Advanced Analytics: Addition of advanced analytics capabilities such as AI-powered insights, predictive forecasting, and anomaly detection for deeper data analysis.

Improved Performance: Performance optimizations to increase report rendering speed, data refresh rates, and overall responsiveness of the Power BI Service.

Enhanced Security: Enhanced security features including row-level security, encryption, and compliance certifications to ensure data protection and regulatory compliance.

Expanded Data Connectivity: Expanded support for connecting to a wider range of data sources, including cloud-based services, big data platforms, and on-premises databases, to facilitate seamless data integration and analysis.