**Power BI Assignment 3**

**1.List and explain different PowerBi products?**

**Ans-** The following are powerBI products: -

|  |  |
| --- | --- |
| Power BI Product | **Description** |
| Power BI Desktop | A free desktop application for creating reports and data visualizations. |
| Power BI Service | A cloud-based service for publishing, sharing, and collaborating on reports and dashboards. Comes in Pro and Premium editions. |
| Power BI Mobile | Mobile apps (iOS, Android, Windows) for accessing and interacting with Power BI reports and dashboards on mobile devices. |
| Power BI Report Server | An on-premises solution for hosting Power BI reports and dashboards within an organization's data center. |
| Power BI Embedded | A platform-as-a-service (PaaS) offering for embedding Power BI reports and dashboards into custom applications and websites. |
| Power BI Dataflows | A feature for creating and managing data preparation processes in Power BI, including data transformation and integration. |
| Power BI Paginated Reports | Allows the creation and publication of pixel-perfect, paginated reports for printing and PDF generation. |
| Power BI Goals | A feature for tracking and visualizing key performance indicators (KPIs) and goals within Power BI. |

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

**Ans**- Limitations solved by Power Bi as follows: -

1.Handling Big data

2.Data Integration

3. Data Refresh and Automation

4. Data Modelling

5: Collaboration and Sharing

6. Perfomance

**3.Explain PowerQuery?**

**Ans-** Power Query is a data transformation and preparation tool used in Microsoft Excel, Power BI, and other Microsoft products. It simplifies the process of gathering, transforming, and loading data from various sources into a usable format.

With Power Query, users can connect to different data sources, apply filters, remove duplicates, pivot tables, and perform advanced transformations, all through a user-friendly interface.

This tool helps streamline data cleaning and shaping tasks, making it easier to create structured datasets for analysis.

**4.Explain PowerMap?**

**Ans**-Power Map is a 3D data visualization tool by Microsoft, previously available as an Excel add-in. It allows users to create interactive, immersive maps and tours to visualize geographical and time-based data. Users can plot data points on a 3D globe, map, or custom image and then explore the data by navigating through time and location. Power Map is particularly useful for uncovering insights in spatial and temporal data, such as sales trends across regions over time

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

Power BI eliminated the need for on-premises SharePoint Server hosting by offering a cloud-based data analytics and reporting platform. With Power BI, organizations can store, analyze, and share data in the cloud, reducing the requirement for maintaining and investing in on-premises servers. Power BI's data integration and sharing capabilities provide a seamless experience for collaborating on reports and dashboards online, without relying on SharePoint for document sharing and collaboration. Real-time updates and scalability further enhance its appeal, making Power BI a modern, cost-effective alternative that eliminates the need for on-premises SharePoint Server installations for data analytics and reporting needs.

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

Following are the updates:-

|  |  |
| --- | --- |
| Feature/Area | Updates in Power BI Service (Power BI 2.0) |
| Performance | Enhanced performance for faster report loading and interaction. |
| Collaboration | Improved collaboration with features like commenting and @mentions in reports. |
| Security | Strengthened security and data protection capabilities for sensitive data. |
| AI Insights | Advanced AI-driven insights and analytics features for smarter data exploration. |
| User Interface | Streamlined and more user-friendly interface for easier navigation and report creation. |
| Data Handling | Better support for handling large datasets and improved data refresh options. |
| Integration | Expanded integration capabilities with various data sources and third-party apps. |