Power BI Assignment 3

1. List and explain different PowerBi products?

Microsoft PowerBI is a suite of business intelligence and data visualization tools that includes the following products:

<u>PowerBI Desktop:</u> A Windows-based application that allows you to create and publish interactive reports and dashboards. PowerBI Desktop is designed for business analysts and data professionals who need to perform advanced data modeling and analysis.

<u>PowerBI Service (previously known as PowerBI Report Server):</u> A cloud-based service that enables you to publish and share reports and dashboards with others in your organization. You can access PowerBI Service from a web browser or the PowerBI Mobile app.

<u>PowerBI Report Server:</u> An on-premises version of PowerBI Service that you can install and run on your own servers. PowerBI Report Server provides the same functionality as PowerBI Service but with the added benefits of data privacy and control.

<u>PowerBI Mobile:</u> A mobile app for iOS and Android devices that enables you to view and interact with PowerBI reports and dashboards on the go. PowerBI Mobile provides access to your PowerBI reports and dashboards from anywhere, at any time.

<u>PowerBI Embedded:</u> A set of APIs and tools that allow developers to embed PowerBI reports and dashboards directly into applications, websites, and portals. PowerBI Embedded enables you to provide business intelligence and data visualization capabilities to your customers, partners, and employees.

<u>PowerBI Dataflows:</u> A self-service data preparation and transformation tool that enables you to clean and shape your data before you import it into PowerBI. PowerBI Dataflows provides an easy-to-use interface for connecting to data sources, transforming data, and creating reusable data transformations.

<u>PowerBI Q&A:</u> A natural language query and reporting tool that allows you to ask questions about your data and get answers in the form of interactive reports and dashboards. PowerBI Q&A enables you to quickly explore your data and find insights without having to write complex queries or build reports from scratch.

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

Microsoft PowerBI addresses several limitations of Microsoft Excel:

Data Volume: PowerBI is designed to handle large datasets, making it possible to visualize and analyze data from a variety of sources, including on-premises and cloud-based systems. In contrast, Excel can become slow and unwieldy when working with large datasets.

Data Visualization: PowerBI provides a wide range of interactive data visualizations and dashboards that can be used to quickly and easily explore and communicate insights from your data. This is an improvement over Excel, which has limited data visualization capabilities.

Collaboration: PowerBI enables multiple users to collaborate on reports and dashboards, making it easy to share data insights and insights across an organization. In contrast, Excel is typically used by individuals and does not support collaboration in real-time.

Data Refreshing: PowerBI can automatically refresh data from a variety of sources, including databases and cloud-based systems. This makes it easy to keep reports and dashboards up-to-date, even as data changes. In contrast, Excel requires manual data refreshing, which can be time-consuming and error-prone.

Data Security: PowerBI provides robust data security features, including role-based access control, data masking, and auditing, making it suitable for use in regulated industries and other security-sensitive environments. In contrast, Excel provides limited data security features, making it less suitable for use in such environments.

Overall, PowerBI offers a more powerful, flexible, and scalable solution for business intelligence and data visualization compared to Excel.

3. Explain PowerQuery?

PowerQuery is a powerful and flexible tool for working with data in Excel and PowerBI. Whether you are working with large datasets, connecting to a variety of data sources, or performing complex data transformations, PowerQuery makes it easy to get the data you need for your analysis.

4. Explain PowerMap?

Power Map is a powerful tool for visualizing geospatial data in Excel. Whether you are looking to explore your data, communicate insights, or create an engaging data visualization, Power Map makes it easy to do so.

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

Microsoft PowerBI eliminates the need to host SharePoint Server on-premises by providing a cloud-based solution for business intelligence and data visualization. With PowerBI, you can connect to data from a variety of sources, including databases, cloud-based systems, and web services, and create interactive reports and dashboards that can be easily shared with others.

SharePoint Server is a web-based collaboration platform that is typically used for document management and information sharing. In the past, organizations would host SharePoint Server on-premises, which required significant IT infrastructure and ongoing maintenance and support.

With PowerBI, however, organizations can bypass the need to host SharePoint Server on-premises by using the cloud-based PowerBI service. This makes it easy to connect to data, create reports and dashboards, and share insights with others, without the need for complex IT infrastructure.

By eliminating the need to host SharePoint Server on-premises, PowerBI provides organizations with a more cost-effective, scalable, and secure solution for business intelligence and data visualization. Additionally, PowerBI provides a range of security features, including role-based access control, data masking, and auditing, making it suitable for use in regulated industries and other security-sensitive environments.

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

Microsoft PowerBI has undergone several updates since its initial release, and PowerBI 2.0 represents a significant update to the PowerBI service. Some of the key updates in PowerBI 2.0 compared to older versions include:

Enhanced collaboration: PowerBI 2.0 introduces several new collaboration features, including the ability to share reports and dashboards with others, work on reports and dashboards in real-time, and receive notifications when reports and dashboards are updated.

Improved performance: PowerBI 2.0 features several performance improvements, including faster data refresh times, improved report rendering times, and improved query performance.

Enhanced data visualization: PowerBI 2.0 introduces several new data visualization capabilities, including new chart types, improved mapping capabilities, and improved support for custom visualizations.

Improved mobile experience: PowerBI 2.0 introduces a new mobile experience, making it easier to access and interact with reports and dashboards on-the-go.

More flexible data sources: PowerBI 2.0 introduces support for additional data sources, including support for Hadoop, Spark, and other big data technologies.

Better data modeling: PowerBI 2.0 introduces several new data modeling features, including improved support for complex data models, new DAX functions, and improved support for calculated columns and measures.

Overall, PowerBI 2.0 represents a significant update to the PowerBI service, and provides users with a more powerful, flexible, and user-friendly solution for business intelligence and data visualization. Whether you are working with large datasets, connecting to a variety of data sources, or performing complex data transformations, PowerBI 2.0 makes it easy to get the data you need for your analysis.