**Power BI Assignment 3**

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

Ans:

Microsoft Power BI is a suite of business analytics tools to analyze data and share insights. It includes the following products:

Power BI Desktop: This is a free desktop application that allows users to connect to, transform, and visualize data. It includes a range of data connectors and advanced modeling and visualization tools.

Power BI Service: This is a cloud-based service that allows users to publish and share their Power BI reports and dashboards. It includes collaboration and data governance features, as well as integration with other Microsoft products such as Excel and SharePoint.

Power BI Mobile Apps: These are apps for iOS, Android, and Windows devices that allow users to access their Power BI dashboards and reports on the go.

Power BI Embedded: This is a set of APIs that allows developers to embed Power BI reports and dashboards into their own applications. It is typically used by software vendors and enterprise developers.

Power BI Report Server: This is an on-premises server that allows organizations to host and distribute Power BI reports and dashboards within their own network. It is typically used by organizations that have strict data governance or security requirements.

Power BI Premium: This is a paid subscription service that provides additional capacity and features for organizations with large-scale deployment and usage of Power BI. It includes features such as enhanced performance, dedicated capacity, and advanced data governance.

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

Ans:

Power BI is a tool designed to address some of the limitations of Excel when it comes to data visualization and analysis. Here are some ways in which Power BI improves upon Excel:

Connecting to a wider range of data sources: Power BI allows users to connect to a wider range of data sources, including databases, cloud services, and web APIs, as well as Excel files. This makes it easier to access and integrate data from various sources.

Improved data modeling and visualization: Power BI includes advanced data modeling and visualization tools, such as DAX (Data Analysis Expressions) for creating calculated columns and measures, and a range of interactive chart types. This allows users to create more sophisticated and interactive reports and dashboards.

Collaboration and sharing: Power BI includes built-in collaboration and sharing features, such as the ability to publish reports and dashboards to the Power BI Service and share them with others. This makes it easier to share insights and collaborate with team members.

Scalability and performance: Power BI is designed to handle large volumes of data and can handle complex data models with many relationships and calculations. This makes it suitable for organizations with large-scale data needs.

Integration with other tools: Power BI integrates with other Microsoft tools such as Excel, SharePoint, and Dynamics 365, as well as a range of third-party tools and services. This allows users to incorporate Power BI into their existing workflows and systems.

1. **Explain PowerQuery?**

Ans:

Power Query, also known as Get & Transform in Excel 2016 and later, is a data preparation and transformation tool that is included with Microsoft Excel and Power BI. It allows users to connect to, transform, and combine data from a wide range of sources, including databases, files, and web services.

Power Query includes a range of features and functions that make it easier to work with data, including:

Data connectors: Power Query includes a range of data connectors that allow users to connect to a wide range of data sources, including databases, files, and web services.

Data transformation: Power Query includes a range of data transformation functions that allow users to clean, shape, and manipulate data, including functions for filtering, grouping, pivoting, and merging data.

Query editor: Power Query includes a visual query editor that allows users to build data transformations by dragging and dropping data fields and applying transformation steps. The query editor shows the steps taken to transform the data and allows users to preview and modify the results.

Data integration: Power Query can be used to combine data from multiple sources and create a single, unified view of the data. This can be useful for creating reports and dashboards that draw on data from multiple sources.

Overall, Power Query is a powerful tool for preparing and transforming data, and is particularly useful for users who need to work with data from multiple sources or who need to clean and shape data before analyzing it.

1. **Explain PowerMap**?

Ans:

Power Map is a 3D data visualization tool that is included with Microsoft Excel and Power BI. It allows users to visualize and explore data on a map by creating interactive 3D maps and animations.

Power Map allows users to:

Visualize data on a map: Power Map allows users to plot data points on a map and customize the appearance of the map and data points using various map styles and data visualizations.

Explore data over time: Power Map supports the visualization of data over time, allowing users to create animations that show how data changes over time.

Add additional layers of data: Power Map allows users to add multiple layers of data to the same map, allowing users to visualize relationships and patterns between different data sets.

Customize map tours: Power Map allows users to create custom map tours, which are interactive presentations that guide users through a sequence of maps and data visualizations.

Overall, Power Map is a useful tool for visualizing and exploring data on a map and is particularly useful for users who want to visualize data over time or who want to create interactive presentations.

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

Ans:

Power BI allows users to publish and share reports and dashboards on the Power BI Service, which is a cloud-based platform for creating, sharing, and collaborating on business intelligence content. The Power BI Service includes features such as report and dashboard authoring, collaboration, data governance, and integration with other tools such as Excel and SharePoint.

By using the Power BI Service, organizations can eliminate the need to host SharePoint Server on premises and can instead access Power BI content through the cloud. This can reduce the cost and complexity of deploying and maintaining on-premises infrastructure and can allow users to access Power BI content from any device with an internet connection.

However, it is worth noting that the Power BI Service is not a replacement for SharePoint Server and does not include all of the features and capabilities of SharePoint. Some organizations may still need to use SharePoint Server on premises for certain purposes, such as document management, team collaboration, and web content management.

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

Ans:

Power BI is a suite of business analytics tools that is constantly evolving and receiving updates. The specific updates that have been made to the Power BI Service (also known as the Power BI cloud service or Power BI online) in recent releases may vary, but here are some examples of updates that have been made to the Power BI Service in recent releases:

Improved report and dashboard authoring: Power BI has added new features and capabilities to the report and dashboard authoring experience, such as new chart types, improved formatting and layout options, and enhanced data visualization features.

Enhanced data connectivity and integration: Power BI has added new data connectors and improved existing connectors, making it easier to connect to and integrate data from a wider range of sources.

Enhanced collaboration and sharing: Power BI has added new features to support collaboration and sharing of reports and dashboards, such as the ability to comment on reports and dashboards, share reports and dashboards with external users, and create custom report and dashboard subscriptions.

Improved performance and scalability: Power BI has made improvements to the performance and scalability of the Power BI Service, including enhancements to the data refresh process and improved support for large volumes of data.

Enhanced data governance and security: Power BI has added new features to support data governance and security, such as data classification, data masking, and data governance workspaces.

Overall, the Power BI Service has undergone significant updates and enhancements in recent releases, and continues to evolve to meet the changing needs of businesses and organizations.