1) List and explain different PowerBi products

ANS :- Microsoft Power BI is a suite of business intelligence (BI) tools that provides data analysis, visualization, and reporting capabilities. Here are the different Power BI products:

1] Power BI Desktop: This is a free, Windows-based application that provides data modeling, transformation, and visualization capabilities. It allows users to import data from a variety of sources, create relationships between data tables, create calculated columns and measures, and build interactive reports and visualizations.

2] Power BI Service: This is a cloud-based service that provides hosting, collaboration, and sharing capabilities for Power BI content. It allows users to publish and share reports and dashboards, and provides collaboration features such as commenting and sharing.

3] Power BI Mobile: This is a mobile app that allows users to access and interact with Power BI content on their mobile devices. It provides offline access, drill-down capabilities, and support for touch-based interactions.

4] Power BI Report Server: This is an on-premises reporting server that provides a secure and scalable environment for deploying Power BI reports and dashboards. It allows users to access and share reports and dashboards within their organization's network.

5] Power BI Embedded: This is a platform that allows developers to embed Power BI reports and dashboards into custom applications or websites. It provides programmatic access to Power BI content, and allows for customization of the user interface and integration with other applications.

6] Power BI Premium: This is a paid subscription service that provides enterprise-level features such as larger data capacity, more frequent data refreshes, and advanced security and administration capabilities. It also includes Power BI Report Server and the ability to embed Power BI content in custom applications.

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

ANS :- While Microsoft Excel is a powerful tool for data analysis and reporting, it has certain limitations that Power BI addresses. Here are some limitations of Excel that Power BI can solve:

1] Large and complex data sets: Excel has limitations when it comes to analyzing large and complex data sets. Power BI can handle large volumes of data and allows users to build complex data models and relationships.

2] Limited data visualization capabilities: Excel has limited capabilities when it comes to data visualization. Power BI provides a wide range of visualization options and allows users to create interactive reports and dashboards.

3] Limited collaboration and sharing capabilities: Excel makes it difficult to share and collaborate on data analysis and reporting. Power BI provides a cloud-based service that allows users to easily share and collaborate on reports and dashboards.

4] Limited data connectivity: Excel has limitations when it comes to connecting to different data sources. Power BI provides connectors for a wide range of data sources, including cloud-based and on-premises data sources.

5] Limited scalability: Excel can become slow and unwieldy when dealing with large data sets. Power BI can handle large data sets and provides faster performance and scalability.

3) Explain PowerQuery?

ANS :- Power Query is a data transformation and cleansing tool in Microsoft Power BI and Microsoft Excel. It allows users to connect to a wide range of data sources, transform and shape data, and load it into their data models or Excel workbooks.

Power Query provides a user-friendly interface for importing data from various sources, including files, databases, and online services. It supports a wide range of data formats, including CSV, Excel, XML, JSON, and more. Users can also connect to databases such as SQL Server, Oracle, MySQL, and Access.

Once data is imported, Power Query provides a range of transformation options to clean and reshape the data. Users can apply filters, sort and group data, remove duplicates, split columns, and combine data from different sources. It also allows users to pivot and unpivot data, transpose rows and columns, and create calculated columns and measures.

Power Query has a powerful data profiling feature that helps users understand their data better. It automatically detects data types, null values, and column statistics, such as minimum and maximum values.

Power Query is highly customizable, allowing users to write advanced queries using the M language. It also supports query folding, which improves performance by pushing some of the data transformation operations back to the data source.

4) Explain PowerMap

ANS: - Power Map is a data visualization tool in Power BI that allows users to create interactive 3D maps and explore data in a geographic context. Power Map enables users to display their data on a map using different types of charts and visualizations, such as column charts, bubble charts, heat maps, and region maps. Users can zoom in and out, rotate the map, and drill down to explore data at different levels of detail.

With Power Map, users can create animated tours that take viewers on a visual journey through their data. These tours can be saved and shared as videos, allowing users to tell compelling stories with their data. Power Map also provides a rich set of formatting and styling options, allowing users to customize the look and feel of their maps to fit their specific needs.

Power Map can be used to explore a wide range of data, such as sales data, customer data, population data, and more. It can be particularly useful for identifying trends and patterns that might not be visible in traditional 2D charts and tables.

Power Map is part of the Microsoft Power BI suite of business intelligence tools and can be used in conjunction with other Power BI products to create integrated data analysis and reporting solutions.

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

ANS :- Prior to Power BI, organizations that wanted to host and share business intelligence content typically needed to set up and maintain an on-premises SharePoint Server environment. This required a significant investment in hardware, software, and IT resources.

With the introduction of Power BI, Microsoft has provided a cloud-based solution for sharing and collaborating on business intelligence content. Power BI eliminates the need to host SharePoint Server on-premises by providing a scalable, secure, and flexible cloud-based platform for hosting and sharing business intelligence content.

Power BI allows users to share reports and dashboards with others in their organization, and it provides a range of collaboration features, such as commenting, sharing, and embedding. Users can access their content from anywhere, using a web browser or a mobile device, and can securely share their content with others outside their organization.

In addition, Power BI provides a range of enterprise-level features, such as data protection, encryption, and compliance with industry standards and regulations. This ensures that organizations can securely store and share their business intelligence content without compromising data security or compliance.

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

ANS:- Power BI 2.0, also known as the new Power BI service, is a major update to the original Power BI service. Some of the key updates and enhancements in Power BI 2.0 include:

1] Improved user interface: The new Power BI service features an improved user interface that is more intuitive and user-friendly. The interface includes a new navigation pane, a new workspace experience, and a new drag-and-drop canvas for building reports and dashboards.

2] New visualization types: Power BI 2.0 includes several new visualization types, such as funnel charts, gauges, and KPI visualizations. It also provides a more extensive set of formatting options for customizing visualizatio

3] Enhanced data connectivity: Power BI 2.0 includes improved connectivity to a wide range of data sources, including Excel workbooks, SharePoint lists, and SQL Server databases. It also includes new connectors for popular online services, such as Salesforce, Marketo, and GitHub

4] Collaboration and sharing: Power BI 2.0 provides enhanced collaboration and sharing capabilities, including the ability to share dashboards and reports with others within or outside of an organization. It also includes a new feature called Power BI groups, which allows users to collaborate on content within a team or group.

5] Mobile app: Power BI 2.0 includes a new mobile app that provides access to reports and dashboards from a mobile device. The mobile app includes a range of features, such as the ability to view, filter, and drill down into data.

6] Power BI Embedded: Power BI 2.0 includes a new feature called Power BI Embedded, which allows developers to embed Power BI reports and dashboards directly into their applications.