1. List and explain different PowerBi products?

There are several Power BI products that cater to different needs of the users. Those are:

* Power BI Desktop: Power BI Desktop is a free, Windows-based application that provides a powerful and flexible environment for creating data visualizations, reports, and dashboards. It allows users to connect to various data sources, create data models, and create interactive visualizations using a drag-and-drop interface.
* Power BI Service: Power BI Service is a cloud-based service that allows users to publish, share, and collaborate on their Power BI content. It allows users to create and share reports and dashboards with others, as well as access data from a wide range of sources, including cloud-based and on-premises data sources.
* Power BI Mobile: Power BI Mobile is a mobile app that allows users to access their Power BI content on the go. It provides a mobile-friendly interface for viewing and interacting with Power BI reports and dashboards, and allows users to receive push notifications when new data is available.
* Power BI Report Server: Power BI Report Server is an on-premises reporting solution that allows users to host, view, and share Power BI reports and dashboards within their organization's own infrastructure. It provides all the functionality of Power BI Service, but within an organization's own network.
* Power BI Embedded: Power BI Embedded is a set of APIs and tools that allows developers to embed Power BI content within their own applications. It enables developers to create customized reports and dashboards that can be seamlessly integrated into their own applications, providing a more personalized user experience.

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

Microsoft Power BI was designed to overcome some of the limitations of Excel, especially when it comes to analyzing large and complex datasets. Here are some of the limitations of Excel that Power BI helps to solve:

* Handling large and complex datasets: Excel can become slow and unresponsive when handling large and complex datasets, making it difficult to analyze data efficiently. Power BI, on the other hand, can handle millions of rows of data and is designed to handle complex data models, allowing users to analyze data quickly and easily.
* Real-time data analysis: Excel is not ideal for real-time data analysis, as users need to manually refresh the data to see the latest updates. Power BI, on the other hand, allows users to connect to real-time data sources and update data in real-time, providing users with the latest information.
* Data modeling and transformation: Excel requires users to manually build data models and perform complex data transformations, which can be time-consuming and prone to errors. Power BI, on the other hand, provides users with a powerful data modeling engine that automatically detects relationships between data tables and performs complex data transformations, making it easier to create accurate and reliable data models.
* Sharing and collaboration: Excel is primarily a desktop application, which makes it difficult to share and collaborate on data analysis with others. Power BI, on the other hand, provides a cloud-based platform that makes it easy to share reports and dashboards with others, as well as collaborate in real-time on data analysis.

In summary, Power BI solves some of the limitations of Excel by providing a more powerful and flexible platform for data analysis and visualization, handling larger and more complex datasets, real-time data analysis, easier data modeling and transformation, and better sharing and collaboration features.

1. Explain PowerQuery?

Power Query is a data preparation and transformation tool that is integrated with Microsoft Power BI and Excel. It is a powerful and flexible tool that allows users to easily connect to various data sources, clean and transform data, and shape it into the desired format for analysis and reporting.

With Power Query, users can perform a wide range of data transformations, including filtering and sorting data, merging multiple data sources, splitting columns, pivoting data, and aggregating data. It also supports a wide range of data sources, including Excel files, text files, CSV files, databases, and cloud-based sources such as Azure SQL Database and SharePoint Online.

Power Query also includes a powerful scripting language called "M" that allows users to create custom data transformations and automate data preparation tasks. With M, users can create complex transformations and reuse them across multiple datasets, saving time and improving data accuracy.

1. Explain PowerMap?

* Power Map is a data visualization tool that is part of the Microsoft Power BI suite of tools. It allows users to create interactive and visually compelling maps and geospatial visualizations that can help users gain insights into their data.
* With Power Map, users can visualize their data on a 3D globe, create custom animations and tours, and apply a range of data visualization techniques, including heat maps, region shading, and data bars. It supports a wide range of data sources, including Excel files, SQL Server databases, and other cloud-based data sources.
* Power Map allows users to create dynamic and interactive maps that can be used to identify patterns, trends, and outliers in their data. Users can interact with the map, zoom in and out, and filter the data to see different perspectives of their data.
* Power Map is designed to be easy to use and intuitive, with a drag-and-drop interface that allows users to create maps quickly and easily. It also includes a range of templates and styles that can be used to create professional-looking visualizations.

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

* Prior to the release of Power BI, SharePoint Server was one of the primary ways for organizations to share reports and dashboards with their users. However, with the introduction of Power BI, Microsoft has eliminated the need for organizations to host SharePoint Server on-premises in order to share reports and dashboards.
* Power BI provides a cloud-based platform for creating, sharing, and collaborating on reports and dashboards. Users can create reports and dashboards using a range of data sources and visualization tools, and then publish them to the Power BI service. Once published, reports and dashboards can be accessed by users from anywhere, using any device.
* This eliminates the need for organizations to host their own SharePoint Server infrastructure, which can be costly and time-consuming to manage. Instead, they can rely on the Power BI service to provide a secure and reliable platform for sharing and collaborating on data.
* Power BI also provides a range of collaboration features, including the ability to share reports and dashboards with specific users or groups, and the ability to collaborate in real-time on data analysis. This makes it easier for teams to work together on data projects, regardless of their location.

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

Power BI 2.0, or the latest version of Power BI Service, introduced a range of updates and improvements over its older version. Some of the key updates include:

* Improved user interface: Power BI 2.0 features a more modern and intuitive user interface, making it easier for users to navigate and find the tools they need.
* Enhanced visualization tools: The latest version of Power BI includes new and improved visualization tools, including a range of custom visuals created by the community.
* Expanded data connectivity: Power BI 2.0 includes expanded connectivity to a range of data sources, including popular cloud-based services such as Salesforce, Google Analytics, and Adobe Analytics.
* Improved data modeling: The latest version of Power BI includes improvements to data modeling, including the ability to create calculated tables and columns, and the ability to create relationships between tables.
* Enhanced collaboration features: Power BI 2.0 includes new and improved collaboration features, including the ability to share reports and dashboards with specific users or groups, and the ability to collaborate in real-time on data analysis.
* Mobile compatibility: Power BI 2.0 includes improved mobile compatibility, allowing users to access their reports and dashboards on-the-go using their mobile devices.
* AI-powered analytics: The latest version of Power BI includes new AI-powered analytics features, such as natural language processing and machine learning capabilities, making it easier for users to gain insights from their data.