**Power BI Assignment 3**

1. List and explain different PowerBi products?

**Power BI Desktop**

* Creating and editing customized reports for every level of expertise.
* Data ingestion from hundreds of supported data sources.
* Data transformation, cleaning, data model creation with built-in Power Query Editor.
* Al-driven analytics.
* Interactive reporting with pre-built or custom visuals.

**Power BI Pro**

* Self-service BI in the cloud.
* Creating, editing and sharing reports and dashboards among users.
* Collaboration in personal and team workspaces.
* 10 GB of storage per user.

**Power BI Premium**

* Enterprise BI both on-premises and in the cloud.
* Dedicated storage (100 TB) and compute resources.
* Consumption of Power BI content without individual licensing.
* Maintaining BI assets on-premises with the Power BI Report server.
* Paginated reporting.
* Multi-geo capability.

**Power BI Embedded**

* Reports, dashboards and visual analytics embedded into applications.
* An extensive library of data connectors, APIs, and fully documented SDKs.

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

• Excel is used to organize data, transform it and perform mathematical operations and calculations. On the other hand, Power BI was conceived as a business intelligence and data visualization tool for businesses.

• Excel has limitations in the amount of data it can work with. In contrast, Power BI can handle much larger amounts of data.

• Power BI can connect to a large number of data sources, while Excel's connectivity capacity is limited. Also, unlike Excel, Power BI can be easily used from mobile devices.

• Power BI has faster processing than Excel.

• Power BI dashboards are more visually appealing, interactive and customizable than those in Excel.

• Power BI is a more powerful tool than Excel in terms of comparison between tables, reports or data files.

• Power BI is more user friendly and easy to use than Excel.

1. Explain Power Query?

Power Query is a data transformation and data preparation engine. Power Query comes with a graphical interface for getting data from sources and a Power Query Editor for applying transformations. Because the engine is available in many products and services, the destination where the data will be stored depends on where Power Query was used. Using Power Query, we can perform the extract, transform, and load (ETL) processing of data.

1. Explain Power Map?

Power Map is a part of its BI (business intelligence) tools and is used to map geographic data from all over the world. The term “Power” refers to the family of BI (business intelligence) products that have been included in various versions of Excel & Power BI, starting from Excel 2010 onward.

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

SharePoint is an important part of how many organizations organize and distribute BI content to users. But a few years ago, Microsoft have introduced the Power BI webpart for SharePoint Online and an updated Reporting Services Report Viewer webpart for SharePoint on-premises. And customers like the flexibility this gives them to build highly-customized SharePoint experiences using their BI content.

1. Explain the updates done in Power Bi Service (power BI 2.0) as compared to older version?
2. Use more granular workspace roles for more flexible permissions management in the new workspaces. In classic workspaces, we can add only individuals to the members and admin lists.
3. Assign user groups to workspace roles: In the new workspaces, you can add multiple Active Directory security groups, distribution lists, or Microsoft 365 groups to these roles, for easier user management.
4. Contact list: In the new workspaces, we can specify who receives notification about workspace activity.
5. Create template apps: we can only create template apps in the new workspaces.
6. Share datasets: To share a dataset outside a specific workspace, we need to save the report that contains the dataset to one of the new workspaces. we can't share datasets from classic workspaces.
7. Creating the new workspaces doesn't create Microsoft 365 groups like classic workspaces do. All the new workspace administration is in Power BI, not in Office 365. You can still manage user access to content through Microsoft 365 groups, if you want. You just add a Microsoft 365 group in the workspace access list.
8. We can't create or consume organizational content packs in the new workspaces. Apps and template apps replace organizational content packs in the new workspaces.