**Power BI Assignment 3**

1. **List and explain different Power Bi products?**
2. **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.
   * AI-driven analytics.
   * Interactive reporting with pre-built or custom visuals.
   * Free of Cost.
3. **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.
* **Cost $9.99** user/month

1. **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.
* **$4,995** dedicated cloud storage and compute resources/month with an annual subscription

1. **Power BI Embedded**
   * Reports, dashboards and visual analytics embedded into applications.
   * An extensive library of data connectors, APIs, and fully documented SDKs.
   * Pay-as-you-go: from **$1.0081/hour** to **$32.2506/hour**
2. **What limitations of Excel, Microsoft solved by Power Bi?**

* Power BI is a **Business Intelligence** (BI) and[**Data Visualisation tool**](https://www.google.com/search?q=Data+Visualisation+tool&oq=Data+Visualisation+tool&aqs=chrome..69i57j0i457j0l6.926j0j9&sourceid=chrome&ie=UTF-8) for developing customized and interactive dashboards from various data resources while Microsoft Excel is a software application from Microsoft that is used for data analytics, mathematical operations, data organization, and various other functions using a spreadsheet.
* Power BI is quite fast in processing when compared to [Microsoft Excel](https://blog.hubspot.com/marketing/microsoft-excel).
* Power BI can efficiently handle a large quantity of information while Microsoft Excel is limited to some extent of information.
* Power BI can manage [Big Data](https://www.zarantech.com/blog/big-trends-in-big-data-analytics/) while Microsoft Excel is not efficient in handling **Big Data**.
* Power BI can connect with different varieties of resources while Microsoft Excel can connect to limited sources.
* Power BI dashboards are more interactive and customizable while Microsoft Excel dashboards are not much interactive.
* [Power BI](https://www.zarantech.com/blog/encyclopedia-on-microsoft-power-bi/) is easy to use and flexible while Microsoft Excel is not so convenient to utilize.
* Power BI is mainly utilized for data visualizations and dashboard sharing to a multitude of users while Microsoft Excel is mainly used for comprehensive driver analysis.
* Power BI is a much more powerful tool contrasting Microsoft Excel.
* Power BI is friendly with mobile phones because of iPhone, Android, and Windows applications while Microsoft excel is not mobile-friendly.

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, you can perform the extract, transform, and load (ETL) processing of

data.

1. **Explain Power Map?**

Microsoft Power Map for Excel is a three-dimensional (3-D) data visualization tool that lets you look at information in new ways. A power map lets you discover insights you might not see in traditional two-dimensional (2-D) tables and charts.

With Power Map, you can plot geographic and temporal data on a 3-D globe or custom map, show it over time, and create visual tours you can share with other people. You’ll want to use Power Map to:

* **Map data** - Plot more than a million rows of data visually on Bing maps in 3-D format from an Excel table or Data Model in Excel.
* **Discover insights** - Gain new understandings by viewing your data in geographic space and seeing time-stamped data change over time.
* **Share stories** - Capture screenshots and build cinematic, guided video tours you can share broadly, engaging audiences like never before. Or export tours to video and share them that way as well.

1. **How power Bi eliminated the need to host SharePoint Server on premises?**
2. **Explain the updates done in Power Bi Service (power BI 2.0) as compared to older version?**

**Power BI 2.0 Updates-**

**Reporting-**

* Unshared and unsynchronized axes for small multiples charts
* Controlling and customizing labels on Azure Maps
* Create dynamic slicers using field parameters (Preview)
* Composite models over Power BI datasets and Analysis Services (Preview)

**Modelling-**

* Streamline your report authoring experience with Optimize ribbon (Preview)
* New DAX function: EVALUTATEANDLOG
* New DAX functions: TOCSV and TOJSON

**Data Connectivity-**

* Many updated data connectors

**Others-**

* Power BI Desktop infrastructure update (WebView2)
* New Power BI color accent

**Older version**

**Reporting-**

* Reverse stack order for stacked column charts
* Query performance improvements
* Power BI Metrics

**Analytics-**

* Quick measure suggestions - experimental feature (Preview)

**Modelling-**

* Relationship editing in the properties pane (Preview)
* DAX formula bar support for Power BI Desktop model view

**Data Connectivity-**

* Introducing tenant setting for Power BI datamarts (preview)