FSDA POWER BI ASSIGNMENT

1. List and explain different PowerBi products?

Power BI Desktop is a free application you install on your local computer that lets you connect to, transform, and visualize your data. With Power BI Desktop, you can connect to multiple different sources of data, and combine them (often called modeling) into a data model. This data model lets you build visuals, and collections of visuals you can share as reports, with other people inside your organization. Most users who work on business intelligence projects use Power BI Desktop to create reports, and then use the Power BI service to share their reports with others.

Power BI is a collection of software services, apps, and connectors that work together to help you create, share, and consume business insights in the way that serves you and your business most effectively. **The Microsoft Power BI** *service* (app.powerbi.com), sometimes referred to as Power BI online, is the SaaS (*Software as a Service*) part of Power BI. In the Power BI service, *dashboards* help you keep a finger on the pulse of your business. Dashboards display *tiles*, which you can select to open *reports* for exploring further. Dashboards and reports connect to *datasets* that bring all of the relevant data together in one place.

Power BI Report Builder is optimized for authoring paginated reports for the Power BI service. This download provides a stand-alone installer for Power BI Report Builder. Power BI Report Builder provides data visualizations that include charts, maps, sparklines, and data bars that can help produce new insights well beyond what can be achieved with standard tables and charts.

Power BI embedded analytics allows you to embed your Power BI items such as reports, dashboards and tiles, in a web application or in a website.

Using Power BI embedded analytics you can:

Deliver compelling data experiences for your end users, enabling them to take action based on insights from your solutions data. Quickly and easily provide exceptional customer-facing reports, dashboards, and analytics in your own apps by using and

branding Power BI as your own. Reduce developer resources by automating the monitoring, management, and deployment of analytics, while getting full control of Power BI features and intelligent analytics.

2. 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.

3. Explain PowerQuery?

The Power Query user experience is provided through the Power Query Editor user interface. The goal of this interface is to help you apply the transformations you need simply by interacting with a user-friendly set of ribbons, menus, buttons, and other interactive components. The Power Query Editor is the primary data preparation experience, where you can connect to a wide range of data sources and apply hundreds of different data transformations by previewing data and selecting transformations from the UI. These data transformation capabilities are common across all data sources, whatever the underlying data source limitations. When you create a new transformation step by interacting with the components of the Power Query interface, Power Query automatically creates the M code required to do the transformation so you don't need to write any code.

4. Explain PowerMap?

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.

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

Different customers may have different interpretations of terms such as "deprecated." To ensure that customers fully understand what we mean by the terminology in this document, we're including this brief definition of each term.

- **Deprecated**

  A deprecated feature is no longer being invested in by Microsoft and we discourage customers from taking a dependency on it if they haven't used it before. Deprecated features are still supported by Microsoft in SharePoint Server 2019 for customers who are already using this feature in previous releases and need the feature for backward compatibility. Deprecated features may be removed in future major releases of SharePoint Server with no additional notice. Customers should begin to explore their options for migrating away from these features.

- **Removed**

  A removed feature is no longer supported by Microsoft in SharePoint Server 2019. In many cases, the feature is actually removed from the product, but in some cases it may still be present. A feature labeled as "removed" is unsupported even if the feature is still present in the product.

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

Content Pack Library

- My Organisation: from here you can easily create you organisational content packs. A content pack is basically a single repository to keep dataests, reports, dashboards, Q&A, integration with other data sources, data refresh and more. You can also package up and publish your dashboards, reports and datasets with your colleagues in a specific group or the entire organisation. You can also browse the content packs that other people in your organisation published.
- Services: you can use lots of online services built to connect to different platforms like Microsoft Dynamics CRM, Microsoft Dynamics Marketing, Visual Studio Online , and much more.

Import Or Connect to Data

- Files: You can upload your reports, data or workbooks from Excel, Power BI Desktop or CSV files. The location of the files could be your local hard drive, on OneDrive Business or OneDrive Personal.
- Databases: You can connect to Azure SQL Database, Azure SQL Data Warehouse, SQL Server Analysis Services Tabular Model or Azure HDInsight (Spark) and browse your live data.

The report's features are improved significantly. We can know change the chart's colours, adding free texts into TextBoxes and much more.

- After logging into Power BI website clock on a desired report
- Right after you open the report you'll get prompted to use the new report canvas