Power BI Assignment 2

1. Explain the advantages of Natural Queries in PowerBi with an example?
   Ans : Natural Queries in PowerBi let us explore our data in our own words using natural language. It helps to make it simple to ask complex questions. As we type our questions power bi Q&A shows relevant and contextual suggestions to help quickly become productive with natural language. It gives fast results.
   this are some of the advantages of Natural Queries.

2. Explain Web Front End(WFE) cluster from Power BI Service Architecture?
   Ans : Web Front End (WFE) cluster manages the initial connection and authentication to the Power BI service. It uses the Azure AD to authenticate client & provide tokens for following client connections to the Power BI service. Its a web-based platform where we can collaborate with other users, share reports created in Power BI Desktop, and create dashboards.

3. Explain Back End cluster from Power BI Service Architecture?
   Ans : Back End cluster determines how clients interact with the Power BI service. This cluster manages visualisations, dashboards, datasets, reports, data storage, data connections, data refresh and all other aspects of interacting with the Power BI service.

4. What ASP.NET component does in Power BI Service Architecture?
   Ans : ASP.NET is a free web framework for building great websites and web applications using HTML, CSS, and JavaScript. we can also create Web APIs and use real-time technologies like Web Sockets.With ASP.NET Web Forms we can build dynamic websites using a familiar drag-and-drop, event-driven model.

5. Compare Microsoft Excel and PowerBi Desktop on the following features:
   Data import
   Data transformation
   Modeling
   Reporting
   Server Deployment
   Convert Models
   Cost

Ans :

Microsoft Excel	PowerBi Desktop
Excel's connectivity capacity is limited in case of data import. Excel has limitations in the amount of data it can work with.	Power BI can connect to a large number of data sources there is no limit to the size of data.
Excel users would achieve the same task using lookup formulas. They'd be limited to 1 million rows and find their models became increasingly slow with the addition of so many formulas	Power BI allows us to combine multiple tables of related data. it work fast with large data also.
Excel is used to organize data, transform it and perform mathematical operations and calculations. It also work with limited data.	Power BI is a business intelligence and data visualization tool for businesses. Power BI dashboards are more visually appealing, interactive and customizable than those in Excel.
Excel is flexible to use and create summary reports in simple steps and formulas. Excel has only a few built-in charts, and we need to work with only those charts to build dashboards.	Power BI has a wide variety of visualizations. We can import many other visuals from the marketplace besides available built-in charts.
Excel is totally focused on structured and simple data models with a wide range of features.	Power BI is focused on data ingest and building potentially complex data models easily.
Students and educators at eligible institutions can sign up for Office 365 Education for free.	Power BI Desktop is free. The Power BI service offers both free and paid licence options. Paid options include

	Power BI Pro, Power BI Premium, and Power BI Premium Per User (PPU).

6. List 20 data sources supported by Power Bi desktop.

   Ans : 1. Excel
   2. Power BI dataset
   3. Power BI dataflows
   4. Dataverse
   5. XML
   6. JSON
   7. PDF
   8. Parquet
   9. SharePoint Folder
   10. Access database
   11. Oracle database
   12. IBM Db2 database
   13. MySQL database
   14. PostgreSQL database
   15. Sybase database
   16. Teradata database
   17. Google BigQuery
   18. text/CSV
   19. Python script
   20. Google sheet