Power BI Assignment 2

1.Explain the advantages of Natural Queries in Power Bi with an example?

ANS: The Q&A feature in Power BI lets you explore your data in your own words by using natural language. Q&A is interactive, even fun. Often, one question leads to others as the visualizations reveal interesting paths to pursue. Asking the question is just the beginning. Travel through your data, refining or expanding your question, uncovering new information, zeroing in on details, or zooming out for a broader view. The experience is interactive and fast, powered by an in-memory storage.

2.Explain Web Front End(WFE) cluster from Power BI Service Architecture?

ANS: The **WFE** cluster manages the initial connection and authentication to the Power BI service.
The **WFE** cluster uses Azure AD to authenticate clients, and provide tokens for subsequent client connections to the Power BI service. Power BI uses the **Azure Traffic Manager** (Traffic Manager) to direct user traffic to the nearest data center. Traffic Manager directs requests using the DNS record of the client attempting to connect, authenticate, and to download static content and files. Power BI uses the **Azure Content Delivery Network** (CDN) to efficiently distribute the necessary static content and files to users based on geographical locale.

3.Explain Back End cluster from Power BI Service Architecture?

ANS: The **Back-End** cluster, once authenticated, the **Back-End** handles all subsequent user interactions.
The **Back-End** cluster determines how authenticated clients interact with the Power BI service. The **Back-End** cluster manages visualizations, user

dashboards, datasets, reports, data storage, data connections, data refresh, and other aspects of interacting with the Power BI service.

4.What ASP.NET component does in Power BI Service Architecture?

ANS: Web Front End Cluster.

The front end services are used for establishing an initial connection and authenticating clients using Azure Active Directory. The Azure Active Directory stores user identities.

5.Compare Microsoft Excel and Power Bi Desktop on the following features:

	MS EXCEL	**POWER BI**
Data import	click the **Data** tab on the ribbon and use the **Get data** drop-down menu to select one of the available choices.	click on **Get data > Get data from another source**. Simply select the platform you wish to import data from, and click **Connect.** Sign in with your credentials (wherever required) to extract data from an external source
Data transformation	Microsoft Excel cannot handle Big Data.	Power BI handles Big Data
Modeling	MDX (Multidimensional Expressions) language, which is used to query and manipulate multidimensional databases.	Power BI is based on a functional language called DAX, which stands for Data Analysis Expressions.
Reporting	Reports are simpler and less appealing than those in Power BI.	More visually appealing, customized, appealing, and interactive reporting.
Server Deployment	Microsoft Excel can connect to limited sources.	Power BI can connect with different varieties of sources
Convert Models	Works with simple and structured data models.	Ideal for quickly creating complex data models.
Cost	Payment Tool	It has a free version and a payment version.

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

ANS:

- Web
- SharePoint list
- OData Feed
- Active Directory
- Microsoft Exchange
- Hadoop File (HDFS)
- Spark
- Hive LLAP
- R script
- Python script
- ODBC
- OLE DB
- Acterys: Model Automation & Planning (Beta)
- Amazon OpenSearch Service (Beta)
- Anaplan
- Solver
- BitSight Security Ratings
- BQE Core
- Bloomberg Data and Analytics
- Celonis EMS (Beta)
- Cherwell (Beta)
- CloudBluePSA (Beta)
- Cognite Data Fusion
- Delta Sharing
- Eduframe (Beta)
- EQuIS (Beta)
- FactSet RMS (Beta)
- FHIR
- Google Sheets