# **Power BI Assignment 2**

#### 1. Explain the advantages of Natural Queries in PowerBi with an example?

Ans: Natural Queries in Power Bi makes the tool user friendly and simple. One doesn't need to learn difficult syntax or algorithms which in turn helps simple, non-tech users to interact with the tool.

This also gives a sort of personalized experience as the end users can convey and gain messages with a good connection.

Hence, because of natural queries, power bi is **easily accessible** to more users not just people with tech background. It also provides **quicker insights** due to simple conveying and one doesn't have to waste time in understanding the technicalities. Users can **engage better with data** naturally.

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

Ans: Web Front End cluster is the part that connects backend and the end user. This is mainly responsible for handling user requests. WFE takes requests by end user and evenly distributes looking after balancing the load as to not overwhelm server. It takes care of rendering visuals.

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

Ans: Back-end cluster is a behind the scene component which doesn't directly engage with end users. It looks after data organization and storage. It also helps process the data into reports and dashboards. Further it automates the tasks and also keeps data safe. Back-end cluster is a very crucial component of Power Bi even though it's not directly in touch with end users.

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

**Ans**: ASP.NET is crucial for web based iteraction in Power Bi. This handles web based user interactions.

#### 5. Compare Microsoft Excel and PowerBi Desktop on the following features:

Data import

Data transformation

Modeling

Reporting

Server Deployment

**Convert Models** 

Cost



#### Ans:

**Data import**: Both can import data from various sources, but Power Bi has better connectivity option and it is built to handle bigger and live data in a better way.

**Data transformation:** Power Bi provides better data transformation than excel, hence aiding data cleaning, merging, etc.

**Modeling**: While modelling in excel is limited to basic table and relationships, Power Bi provides complex modelling, giving room for calculated fields, measures and hierarchies.

**Reporting**: Excel's reporting capabilities limited to charts, basic tables and pivot tables meanwhile with Power Bi we can get more interactive visualizations including slicers and drill throughs.

**Server Deployment**: Due to less to no collaborative features in excel, power Bi is better wrt server deployment as it is designed for publishing and collaboration. Hence, provides secure, cloud-based sharing options.

**Convert Models**: Excel models can be imported into power bi and can be converted and enhances for further analytics.

**Cost**: Excel is more cost effective as Power Bi requires subscriptions in order to access higher features.

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

Ans: 1. Excel, 2. Mysql, 3. CSV, 4. JSON, 5. XML, 6. Vertica 7. Google Analytics 8. R Script, 9. Python script, 10. MongoDb, 11. MariaDB, 12. Data Bricks, 13. Github, 14. Salesforce, 15. Share point, 16. Snowflake, 17. Paraquet, 18. Avro, 19. Dynamics 365, 20. Azure

