**Power BI Assignment 2**

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

It is time saving concept to write a query to find out the result.

It will give the result as per your query.

It accept all the queries related to Table name, Column Name and Data Set and show the visual as per query.

It autocorrect the mistakes.

Example:

* Ask natural questions which sales has the highest revenue?
* Use relative date filtering Show me sales in the last year
* Return only the top N Top 10 products by sales
* Provide a filter Show me sales in the USA
* Provide complex conditions Show me sales where product category is Category 1 or Category 2
* Return a specific visual Show me sales by product as pie chart
* Use complex aggregations Show me median sales by product
* Sort results Show me top 10 countries by sales ordered by country code
* Compare data Show me date by total sales vs total cost
* View trends Show me sales over time

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

Ans: The Power BI service architecture is based on two clusters – the Web Front End (WFE) cluster and the Back-End cluster. The WFE cluster manages the initial connection and authentication to the Power BI service.

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

Ans: The Power BI service architecture is based on two clusters – the Web Front End (WFE) cluster and the Back-End cluster. The WFE cluster manages the initial connection and authentication to the Power BI service, and once authenticated, the Back-End handles all subsequent user interactions

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

Ans; The ASP.NET component within the WFE cluster parses the token to determine which organization the user belongs to, and then consults the Power BI Global Service. The WFE specifies to the browser which back-end cluster houses the organization's tenant.

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

Data import- In Power BI we can import data from multiple data sources but in excel has certain limitation.

Data transformation- Data can be transform easily in Power BI with power query editor but in excel does not have this feature.

Modeling- Data modelling can be done in Power BI as well as in excel but in excel it consumes much more time as compare to power BI to established relationship between the tables.

Reporting- In reporting view we can show the data with multiple visuals that all are linked with each other in power. But in excel there are only limited visuals available to show the data.

Server Deployment- Power BI required server deployment for publishing f report but excel doesn’t.

Convert Models- Excel has Power pivot for data modelling and Power BI has modelling view for data modelling.

Cost- Power Bi is costly as compare to excel.

1. List 20 data sources supported by Power Bi desktop.
2. SQL Server database
3. Access database
4. SQL Server Analysis Services database
5. Oracle database
6. IBM Db2 database
7. IBM Informix database (Beta)
8. IBM Netezza
9. MySQL database
10. PostgreSQL database
11. Sybase database
12. Teradata database
13. SAP HANA database
14. SAP Business Warehouse Application Server
15. SAP Business Warehouse Message Server
16. Amazon Redshift
17. Impala
18. Google BigQuery
19. Vertica
20. Snowflake
21. Essbase