**Power BI Assignment 2**

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

Answer. The Natural Queries in power Bi or we can say Q&A is a special feature available in power bi dashboard as well as in the power bi service. With the help of this feature we can ask questions to the tool in simple English language and it will give answers in the form of values or visuals both. Like if we right Average of student marks so it will show the average, or if What is the sales as per the region so it will show the map and the sales.

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

Answer. The front-end services handle the initial connection and Azure Active Directory client authentication. User IDs are kept in the Azure Active Directory. After authentication, user requests are routed through Azure Traffic Manager to the closest data center. The Azure Content Delivery Network (CDN) makes static Power BI content and files available to users when a client or user has been authorized. And this is commonly known as Web Front End (WFE) Cluster.

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

Answer. Visualizations, datasets, storage, reports, data connections, data updating, and other Power BI interactions are handled by the Power BI services on the back end. A web client can only directly interface with Azure API Management and Gateway Role on the backend. These two parts are in charge of routing, load balancing, authentication, and authorization.

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

Answer. ASP.NET component can be used to embed power bi services.

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

Data import – This is an easy process in both the apps but in power bi we got a huge variety to choose what data to import.

Data transformation – Transforming of data is also similar in both to do in the power query editor.

Modeling – We can easily do data modelling in power bi.

Reporting – This part is also a big plus point for power bi. We can make were fine and interactive reports.

Server Deployment – This could only takes place in power bi.

Convert Models – Converting models is more convenient in power bi.

Cost – Excel and power bi desktop both are free software but power bi service is a cloud based system which is chargeable.

1. **List 20 data sources supported by Power Bi desktop.**

* Answer.
* Excel
* Text/CSV
* XML
* JSON
* Oracle Database
* IBM DB2 Database
* MySQL Database
* PostgreSQL Database
* Teradata Database
* SAP Business Warehouse server
* Amazon Redshift
* Google BigQuery (Beta)
* Azure SQL Database
* Salesforce Reports
* Facebook
* GitHub
* Snowflake
* Google Analytics
* Python Script
* R Script