**Power BI Assignment 2**

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

Answer : Natural Query language in Power Bi helps a person with zero SQL / technical knowledge get an insight of the data. For e.g. instead of typing select sum(sales) from customer table, user can simply say “Total Sales”

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

Answer : The front end also called the web front-end cluster acts as an intermediary between clients and the back end. The front end services are used for establishing an initial connection and authenticating clients using Azure Active Directory.

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

Answer : The Power BI services at the back end take care of visualizations, datasets, storage, reports, data connections, data refreshing, and other interactions with Power BI. At the back-end, a web client has only two direct points of interaction, Azure API Management, and Gateway Role. These two components are responsible for load balancing, authentication, authorization, routing, etc.

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

Answer : ASP.net is used to authenticate clients and provide tokens for subsequent client connections to the Power BI service.

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

Data import

Data transformation

Modeling

Reporting

Server Deployment

Convert Models

Cost

|  |  |  |
| --- | --- | --- |
| Features | Power BI | Excel |
| Data import | Power BI can connect to almost 80 data sources | Excel also has a lot of data sources but limited compared to Power BI |
| Data transformation | Data Transformation is possible | Data Transformation is possible |
| Modeling | Complex data models | Ability to work on simple and structured data models |
| Reporting | Attractive and interactive reports | Simple and less attractive reports |
| Server Deployment | Can be published on Cloud | Not possible |
| Convert Models | Can be changed after the model is created | Will become a re-do |
| Cost | Available for free | Not free |

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
* Sybase Database
* Teradata Database
* SAP HANA Database
* SAP Business Warehouse server
* Amazon Redshift
* Impala
* Google BigQuery (Beta)
* Azure SQL Database
* Salesforce Reports
* Google Analytics
* Facebook
* GitHub