

Assignment 2

Q1 Explain the advantages of Natural Language Queries in the Power BI with examples.

Ans → Natural Language Query is the ability to use the natural language expressions to discover and understand data and accelerates the process of finding answers the data provides.

→ It provides a translation mechanism that helps bridge the gap between technical and non-technical users.

→ Some examples of NLP are :- (1) Cognos Analytics - AI assistant (2) Amazon QuickSight Q.

Q2 Explain the Web Front End (WFE) cluster from Power BI Service Architecture.

Ans → Clients and the back end are connected by the Front End, commonly known as the web front end cluster.

→ 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 make static Power BI content and files available to users when a client or user has been authorized.

(Q3) Explain Back End cluster from Power BI Service Architecture?

Ans → Visualizations, datasets, Storage, reports, data connections, data refresh scheduling and other Power BI functionalities are handled by the Power BI Services on the backend.
→ A web client uses only loosely coupled with Azure AD management and Gateway role on the backend.
→ These two parts are in charge of security, load balancing, authentication and authorization.

(Q4) What ASP.NET component does in Power BI Service Architecture?

Ans It provides a web based platform where you can share the reports made on power BI desktops and create the dashboard.

(Q5) Difference between Excel and Power BI

Excel	Power BI
① Excel reports are normal and ordinary when compared to Power BI reports.	① Power BI allows advance features in cross filtering between the charts.
② Excel does not have advance cross filtering between the charts.	② Power BI provides the advance cross filtering between charts.
③ Excel is focused on the structural and simple data models.	③ Power BI is focused on data ingest and building complex data models.
④ Processing speed is slow	④ Processing speed is fast.
⑤ MDX language for querying the data model	⑤ DAX language for querying the data model.
⑥ Mostly used for deep business analysis	⑥ Used for visualization and dashboard sharing.

⑥ List 20 sources requested by Powers BI directory -

Dir → Flat Files

→ SQL database

→ ODI feed

→ Blank Query

→ Azure Cloud

→ Online Services

→ Blank Query

→ Hadoop Directory

→ SaaS Directory

→ Active Directory

→ SQL Servers

→ Analytics Services

→ Text/CSV

→ COBOL

→ XML

→ JSON

→ Sharepoint folders

→ Access database

→ Oracle database

→ Sybase database