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

Answer-The Q&A feature in Power BI lets you explore your data in your own words by using natural language. Q&A is interactive, even fun. Often, one question leads to others as the visualizations reveal interesting paths to pursue. Asking the question is just the beginning. Natural language query (NLQ) is a capability in BI software solutions that allows people to ask questions of data within their analytics platform, using everyday language as they would to another person, to find information they need to make business decisions. For example, you can use Power BI Desktop to create reports for your own team about customer engagement statistics and you can view inventory and manufacturing progress in a real-time dashboard in the Power BI service. You can create a paginated report of mailable invoices, based on a Power BI dataset.

2. Explain Web Front End(WFE) 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.

Anyone trying to build a power BI developer career should join this excellent certification courses like Knowledge Hut Business Intelligence and Visualization for beginners to understand the workings of Power BI and its architecture which will help you get high-paying jobs as a Power BI developer.

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

All reports you build in Power BI Desktop are published on the Power BI Service cloud platform.

Users can use client platforms, including websites, mobile devices, etc., to view the reports and dashboards from the Power BI Service. As a result, each client wishing to access content generated by Power BI must engage with the Power BI Service. Therefore, we must examine the inner workings of Power BI Service to understand how it functions.

The architecture of Power BI Service is divided into two sections:

1. Front End cluster

2. Back End cluster

4. Compare Microsoft Excel and Power Bi Desktop on the following features:

Answer-.

Data import-

Excel is used to organize data, transform it and perform mathematical operations and calculations. On the other hand, Power BI was conceived as a business intelligence and data visualization tool for businesses. Excel has limitations in the amount of data it can work with.

2-Data transformation-

The Power Query tool within Excel allows you to load data from different sources, perform complex data transformations, and then import that data into your Excel workbook.

3-Modeling

Data' tab to create and manage the data you have imported in Power BI. 'Model' tab will help you manage the data models and relationships. This is the area you can use to fill in your visualizations and reports.

These are different chart types and visualization you can use to design your reports.

Data models are a foundational element of software development and analytics. They provide a standardized method for defining and formatting database contents consistently across systems, enabling different applications to share the same data.

4-Reporting

A Power BI report is a multi-perspective view into a dataset, with visuals that represent findings and insights from that dataset. A report can have a single visual or many pages full of visuals. Depending on your job role, you might be someone who designs reports, or you might be a business user who consumes reports.

In Excel it is so ubiquitous, most people in your organization are likely to be familiar with it. This will ensure a short (or non existent) learning curve during implementation. Another benefit is that Excel allows you to use templates and formulas to aggregate data.

5-Server Deployment

Report Server gives your users access to rich, interactive reports, and the enterprise reporting capabilities of SQL Server Reporting Services. Explore visual data and quickly discover patterns to make better, faster decisions. At the same time, generate pixel-perfect paginated reports your business needs. You also have the ability to confidently scale to thousands of users because Power BI Report Server is based on a proven, enterprise-grade platform.

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

Answer The Database category provides the following data connections:

- SQL Server database
- Access database
- · SQL Server Analysis Services database
- · Oracle database
- · IBM Db2 database
- · IBM Informix database (Beta)
- · IBM Netezza
- MySQL database
- PostgreSQL database
- · Sybase database
- Teradata database
- · SAP HANA database
- SAP Business Warehouse Application Server
- · SAP Business Warehouse Message Server
- Amazon Redshift
- · Impala
- Google BigQuery
- · Google BigQuery (Azure AD)(Beta)
- Vertica
- · Snowflake