
Power BI Assignment 2

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

Ans. Natural Queries allow users to interact with PowerBI using natural language instead of written queries. This can make it easier for users to retrieve the data they need without having to understand the underlying database structure or query syntax.

Some advantages of using Natural Queries in PowerBI include:

>Improved User Experience: Users can ask for the information they need using plain English, which can be more intuitive and less intimidating than written queries.

>Enhanced Accessibility: Natural Queries can help make data more accessible to a wider range of users, including those who may not have technical expertise or experience with database querying.

>Increased Productivity: By allowing users to access data more quickly and easily, Natural Queries can help to increase overall productivity.

Example: Suppose a user wants to know the total sales in the month of January, they can simply type a natural query like "What was the total sales in January?" and PowerBI will display the answer in a visual format.

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

Ans. The Web Front End cluster in Power BI Service Architecture is an important component that is responsible for serving web pages and handling user requests. It provides high availability, scalability, and reliability, which helps to ensure that the Power BI Service is always available and responsive to end users.

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

Ans. The Back End cluster in Power BI Service Architecture is responsible for managing and processing the data used in Power BI reports and dashboards. This component provides data storage, data processing, and data analysis capabilities, which are critical to the overall functionality and performance of the Power BI Service.

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

Ans. ASP.NET is a component that is used in the Power BI Service Architecture to build and serve web pages and handle user requests. It provides a flexible and scalable platform for building and serving web pages, and is critical for the performance and reliability of the Power BI Service.

5. Compare Microsoft Excel and PowerBI Desktop on the following features:

Ans.

Data import
Data transformation
Modelling
Reporting
Server Deployment
Convert Models
Cost

Data import:

Excel: Excel supports importing data from various sources such as CSV, text files, databases, and cloud-based data sources.

Power BI Desktop: Power BI Desktop supports importing data from a wide range of sources, including Excel, databases, cloud-based data sources, and web services.

Data transformation:

Excel: Excel provides basic data transformation features such as sorting, filtering, and pivot tables.

Power BI Desktop: Power BI Desktop provides advanced data transformation features such as query folding, data cleansing, and data wrangling, as well as integration with Power Query.

Modelling:

Excel: Excel provides basic modelling features such as pivot tables, named ranges, and calculated fields.

Power BI Desktop: Power BI Desktop provides advanced modelling features such as data relationships, calculated tables, and measures, as well as integration with DAX. **Reporting:**

Excel: Excel provides basic reporting features such as pivot tables, charts, and graphs. **Power BI**

Desktop:

Power BI Desktop provides advanced reporting features such as interactive reports, dashboards, and visualizations, as well as integration with Power View.

Server Deployment:

Excel: Excel can be used to publish workbooks to SharePoint or OneDrive, but it does not have a dedicated server deployment option.

Power BI Desktop: Power BI Desktop can be deployed to Power BI Report Server or Power BI Service, which are dedicated servers for Power BI content.

Convert Models:

Excel: Excel does not have a dedicated feature for converting models to other platforms.

Power BI Desktop: Power BI Desktop can convert models to other platforms such as Power BI Report Server or Power BI Service, or export them to other file formats such as Excel or PDF.

Cost:

Excel: Excel is included in various Microsoft Office packages and is available for purchase as a standalone product.

Power BI Desktop: Power BI Desktop is a free product but may require a Power BI Pro or Power BI Premium license to use certain features, such as publishing to Power BI Service or Power BI Report Server.

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

Ans.

SQL Server	Azure Data Lake Storage
Oracle	Azure Blob Storage
SharePoint List	Power BI Report Server
SQL Server Analysis Services (SSAS)	Access
CSV	Oracle Essbase
XML	Amazon Redshift
JSON	Google BigQuery
Web Services	Excel
Azure SQL Database	OData Feed
Power BI Service	Amazon Redshift
