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

A natural language query is input that consists solely of terms or phrases spoken normally or entered as they might be spoken, without any non-language characters, such as the plus symbol or the asterisk, and without any special format or alteration of syntax.

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

The Web Front End (WFE) cluster. The WFE cluster manages the initial connection and authentication to the Power BI service. The Back-End cluster. Once authenticated, the Back-End handles all subsequent user interactions. Power BI uses Azure Active Directory (Azure AD) to store and manage user identities Power BI architecture is a service built on top of Azure. There are multiple data sources that Power BI can connect to. Power BI Desktop allows you to create reports and data visualizations on the dataset. Power BI gateway is connected to on-premise data sources to get continuous data for reporting and analytics

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

The Back-End cluster determines how authenticated clients interact with the Power BI service. The Back-End cluster manages visualizations, user dashboards, datasets, reports, data storage, data connections, data refresh, and other aspects of interacting with the Power BI service.

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

ASP.Net is a perfect tool used for big data analysis and data science integration. Users can benefit a lot from ASP.Net in big data analytics. (.) Net platform, which belongs to Microsoft has extensive functionalities for developing secure applications.

### Compare Microsoft Excel and PowerBi Desktop on the following features

Data import- Power BI has a wide variety of visualizations. We can import many other visuals from the marketplace besides available built-in charts. Excel has only a few built-in charts, and we need to work with only those charts to build dashboards.

Data Transformation-Power BI dashboards are more visually appealing, interactive and customizable than those in Excel. Power BI is a more powerful tool than Excel in terms of comparison between tables, reports or data files.

**Modeling**- Power Query is the recommended experience for importing data. Power Pivot is great for modeling the data you've imported. Use both to shape your data in Excel so you can explore and visualize it in PivotTables, PivotCharts, and Power BI.

**Reporting**- Excel is flexible to use and create summary reports in simple steps and formulas. Power BI has a wide variety of visualizations.

**Server Deployment-**Power BI Report Server is an on-premises report server with a web portal in which you display and manage reports and KPIs. Power BI is a collection of software services, apps, and connectors that work together to turn your unrelated sources of data into coherent, visually immersive, and interactive insights.

**Convert Models -** Excel workbook you create with the Power BI dataset, just like any other workbook. However, you can't publish or import the workbook back into Power BI. You can only publish or import workbooks into Power BI that have data in tables, or a data model

Cost-Power BI Desktop is offered as a free download; Users can purchase Power BI Pro

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

- 1 Excel workbook
- 2 Power BI datasets
- 3 Dataflows
- 4 Dataverse
- 5 SQL Server
- 6 Analysis services
- 7 Text/CSV
- 8 Web
- 9 Odata feed
- 10 Blank query
- 11 Power bi template app
- 12 XML
- 13 PDF
- 14 SNOWFLAKE
- 15 Microsoft exchange
- 16 power bi data sets
- 17 Azure data sets insights
- 18 Azure table storage
- 19 SAP HANA DATABASE
- 20 IBM informix database(beta)