

Power BI basic

Question 1: What is Power BI and why is it used in businesses?

Power BI is a Business Intelligence (BI) tool developed by Microsoft that helps users analyze data and create interactive reports and dashboards.



Why it is used in businesses:

- To convert raw data into meaningful insights
- To create visual reports and dashboards
- To track KPIs (Key Performance Indicators)
- To support data-driven decision making
- To combine data from multiple sources

It helps businesses understand trends, performance, and future planning.

Question 2: Name and explain the three main components of Power BI



Power BI Desktop

- Used to create reports and dashboards
- Allows data cleaning, modeling, and visualization



Power BI Service (PowerBI.com)

- Cloud-based platform
- Used to publish and share reports
- Enables collaboration



Power BI Mobile

- Mobile app for Android/iOS

- Used to view dashboards on phone or tablet

Question 3: Explain the Power BI Workflow

Step 1: Get Data

Import data from Excel, CSV, Database, etc.

Step 2: Transform Data

Clean and modify data using Power Query.

Step 3: Data Modeling

Create relationships between tables.

Step 4: Create Visualizations

Build charts, graphs, and dashboards.

Step 5: Publish & Share

Upload reports to Power BI Service and share with others.

Question 4: List any four data cleaning tasks in Power Query

1. *Remove duplicate rows*
 2. *Change data types (Text, Date, Number)*
 3. *Remove blank or null values*
 4. *Split columns (e.g., Full Name into First & Last Name)*
-

Question 5: Step-by-Step Instructions to Load the Real Estate Dataset

1. *Open **Power BI Desktop***
2. *Click **Get Data** → Select **Text/CSV***
3. *Browse and select **Real_Estate_Data_100_Rows.csv***
4. *Click **Open***
5. *Preview the data*

6. Click **Load** (or click **Transform Data** if cleaning is required)
7. Click **Close & Apply**

Now the dataset is loaded successfully.

Question 6: Define Data View, Report View, and Model View

Data View

- Shows data in table format
- Used to check rows and columns

Report View

- Used to create visualizations
- Add charts, tables, slicers, etc.

Model View

- Used to create relationships between tables
 - Shows how tables are connected
-

Question 7: Different data sources supported by Power BI

Power BI supports many data sources such as:

- Excel
- CSV/Text files
- SQL Server
- MySQL
- Oracle
- Web data
- SharePoint
- Google Analytics
- Azure databases

- *Power BI datasets*
-

Question 8: Split Owner Name into First Name and Last Name

Steps in Power BI (Power Query):

1. Click ***Transform Data***
2. Select the ***Owner Name*** column
3. Go to ***Split Column***
4. Choose ***By Delimiter***
5. Select ***Space*** as delimiter
6. Click ***OK***
7. Rename columns as:
 - *First Name*
 - *Last Name*
8. Click ***Close & Apply***

Now the Owner Name is successfully split into two columns.
