1. What is the purpose of a PivotTable in Excel?

Answer :- The purpose of an Excel **PivotTable** is to **quickly summarize, analyze, explore, and present large amounts of detailed data**. They are a powerful tool for transforming raw, complex data into meaningful and manageable insights without needing to write complex formulas.

2. Create a PivotTable to show Total Sales by Region.

Answer :-

Row Labels	Sum of Sales
East	467
North	347
South	2518
West	3497
Grand Total	**6829**

3. Apply Conditional Formatting to highlight sales greater than 400.

Answer :-

Date	Region	Product	Sales	Quantity
1/1/2024 0:00	West	Mangoes	456	93
1/10/2024 12:37	South	Oranges	348	56
1/20/2024 1:15	South	Mangoes	247	76
1/29/2024 13:53	West	Apples	230	37
2/8/2024 2:31	West	Mangoes	281	50
2/17/2024 15:09	West	Oranges	334	52
2/27/2024 3:47	South	Apples	417	29
3/7/2024 16:25	West	Apples	441	44

3/17/2024 5:03	South	Mangoes	76	63
3/26/2024 17:41	West	Oranges	441	79
4/5/2024 6:18	South	Mangoes	205	23
4/14/2024 18:56	West	Oranges	483	97
4/24/2024 7:34	East	Mangoes	467	97
5/3/2024 20:12	West	Mangoes	380	92
5/13/2024 8:50	South	Oranges	497	71
5/22/2024 21:28	South	Mangoes	409	81
6/1/2024 10:06	West	Oranges	53	45
6/10/2024 22:44	West	Apples	398	33
6/20/2024 11:22	North	Oranges	347	35
6/30/2024 0:00	South	Apples	319	45

4. Explain the difference between Sorting and Filtering with an example from this dataset.

Answer :-

Sorting changes the *order* of the data.

- **Goal:** To arrange all the records based on the values in one or more columns (e.g., ascending/descending order).
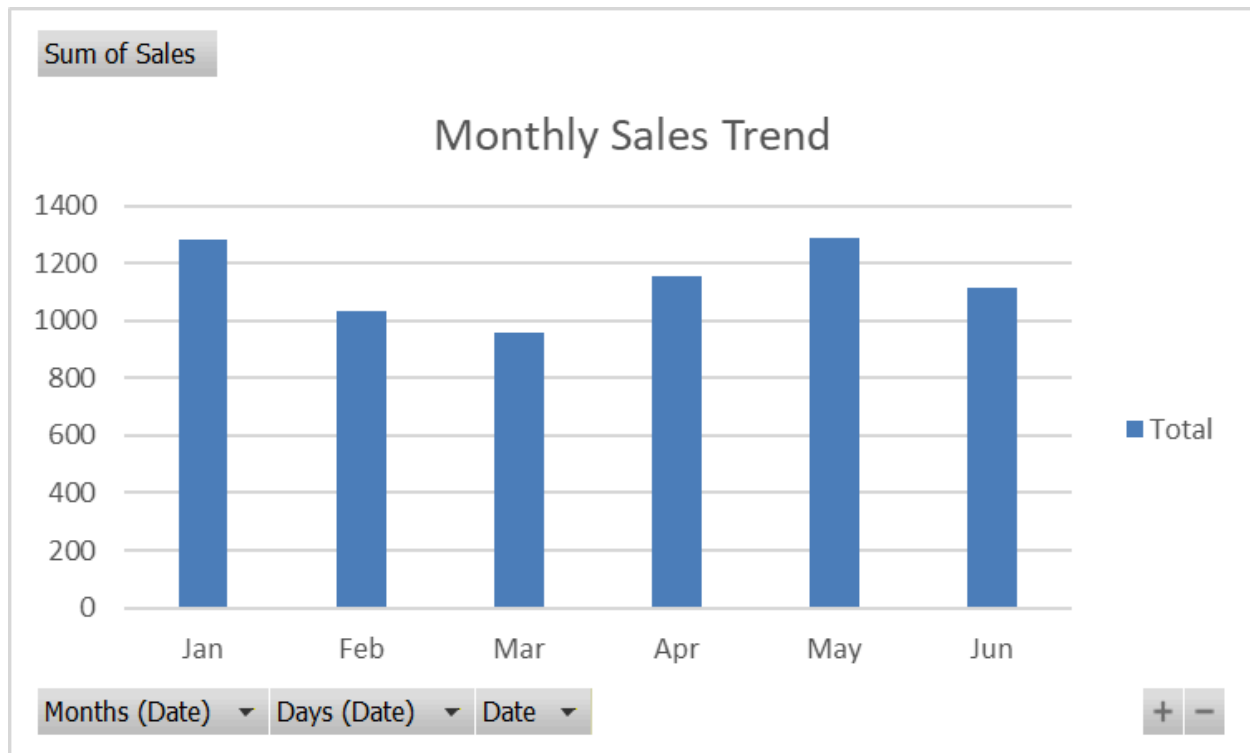- **Result:** The number of rows in the dataset **remains the same**.

Filtering changes the *content* of the data.

- **Goal:** To display only the records that meet a specific set of criteria.
- **Result:** The number of rows in the dataset **decreases** (or stays the same if every row meets the criteria), as only a subset is shown.

Example :- **IN EXCEL WORKSHEET**

5. Create a PivotChart showing Monthly Sales Trend.

Answer :-

6. Use a Slicer to filter data by Product and observe changes in sales.

Answer :-

Date	Region	Product	Sales	Quantity
1/29/2024 13:53	West	Apples	230	37
2/27/2024 3:47	South	Apples	417	29
3/7/2024 16:25	West	Apples	441	44
6/10/2024 22:44	West	Apples	398	33
6/30/2024 0:00	South	Apples	319	45

Product

Apples

Mangoes

Oranges

7. Why are Dashboards important for decision-making in business analysis?

Answer :- Dashboards are **crucial** for decision-making in business analysis because they transform large, complex datasets into **easy-to-understand, visual insights** that allow decision-makers to quickly and effectively take action.

Key Importance of Dashboards

1. Real-Time Performance Monitoring
2. Clarity and Data Accessibility
3. Fostering Data-Driven Culture
4. Speed and Efficiency in Decision-Making

8. Create a Dashboard that includes:
- Sales by Region (PivotTable + Chart)
- Product Filter (Slicer)
- Monthly Trend (Line Chart)

Answer :- **IN EXCEL WORKSHEET**

9. Group dates in the PivotTable into Months and calculate the average sales per month.

Answer :- **IN EXCEL WORKSHEET**

10. Combine Apples and Oranges into one group called Fruits and compare its sales with other products.

Answer :-

Row Labels	Sum of Sales
Fruits	**4308**
Apples	1805
Oranges	2503
Mangoes	**2521**
Grand Total	**6829**