1. Name three types of visuals you can create in Power BI.

- Bar/Column chart → Compare values across categories.
- **Line chart** \rightarrow Show trends over time.
- **Pie/Donut chart** \rightarrow Show proportions of a whole.

(Also: table, card, scatter plot, map, etc.)

2. How do you add a slicer to a report?

- 1. Go to **Visualizations pane**.
- 2. Select **Slicer** (filter icon).
- 3. Drag a field (e.g., Quarter) to the slicer field. Now users can filter all visuals using that slicer.

3. What is the difference between a bar chart and a column chart?

- **Bar chart** → Horizontal bars. Best for long category names.
- Column chart \rightarrow Vertical bars. Best for time series or short labels.

4. How do you change the color of a visual background?

- 1. Select the visual.
- 2. Go to **Format pane** \rightarrow *Visual* > *Background*.
- 3. Pick a color or custom hex code.

5. What does "drill-down" mean in a visual?

Drill-down lets you go deeper into hierarchy data.

Example: Region \rightarrow Country \rightarrow City.

• Click the **drill-down arrow** to see details step by step.

6. Create a bar chart showing SalesAmount by Region.

- 1. Insert Bar chart.
- 2. Drag Region \rightarrow Axis.
- 3. Drag SalesAmount \rightarrow Values.

7. Add a slicer for Quarter to filter all visuals on the page.

- 1. Insert **Slicer**.
- 2. Drag Quarter \rightarrow Field.
- 3. Make sure **sync slicer** is ON (if multiple pages).

8. Format the bar chart to show data labels.

- 1. Select bar chart.
- 2. Go to **Format pane** \rightarrow *Data labels*.
- 3. Toggle ON.

9. Use a line chart to show SalesAmount trends over Quarter.

- 1. Insert Line chart.
- 2. Drag Quarter \rightarrow X-axis.
- 3. Drag SalesAmount \rightarrow Values.

10. Add a tooltip to display Product details when hovering over bars.

- 1. Create a **new page** \rightarrow Turn it into a tooltip page.
- 2. Add Product and other details.
- 3. In bar chart \rightarrow **Tooltip settings** \rightarrow Choose your tooltip page.

11. Sync slicers across multiple report pages.

- 1. Select slicer \rightarrow View > Sync slicers pane.
- 2. Choose which pages the slicer applies to.

12. Create a custom visual with dynamic measure selection (e.g., Sales vs. Profit).

- Use a **parameter table** with measures.
- Example DAX:

```
SelectedMeasure =
SWITCH(
     SELECTEDVALUE(MeasureTable[MeasureName]),
     "Sales", SUM(Sales[SalesAmount]),
     "Profit", SUM(Sales[Profit])
)
```

• Use this in the visual → now users toggle between Sales/Profit.

13. Implement a hierarchy for Region > Product > Quarter drill-down.

- 1. In Fields pane, drag Product under Region, and Quarter under Product.
- 2. Use hierarchy in chart.
- 3. Enable **drill-down** button on visual.

14. Use bookmarks to toggle between two visuals in the same space.

- 1. Place two visuals in same spot.
- 2. Create **Bookmark A** (first visual visible).
- 3. Create **Bookmark B** (second visual visible).
- 4. Add **buttons** to switch bookmarks.

15. Optimize a slow-rendering report with 10+ visuals.

- Use **aggregations** (summarized tables instead of raw data).
- Limit visuals per page (try ≤ 8).
- Disable auto date hierarchy if not needed.
- Optimize DAX (use SUMX carefully, avoid too many CALCULATE).
- Use **import mode** instead of DirectQuery if possible.