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

- Bar chart
- Line chart
- Map (others include pie charts, tables, KPIs, matrix, and custom visuals)

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

- Click "Slicer" from the Visualizations pane
- Drag a field (e.g., Quarter) to the **Field well**
- Resize and position the slicer on the report page

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

Chart Type Orientation
Bar Chart Horizontal bars
Column Chart Vertical bars

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

- Select the visual → Go to Format pane (paint roller icon)
- Expand "General → Effects → Background"
- Set a color and adjust transparency

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

It allows users to **click on a data point** (e.g., region) and **see deeper details** (e.g., products in that region). Uses **hierarchies** for multi-level data exploration.

6. Create a bar chart showing SalesAmount by Region:

- Select Bar Chart visual
- Drag Region to Axis
- Drag SalesAmount to Values

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

Add a Slicer visual

- Drag Quarter field to the slicer
- All visuals will auto-filter (if fields are related)

8. Format the bar chart to show data labels:

• Select the bar chart \rightarrow Format pane \rightarrow Data Labels \rightarrow On

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

- Select Line Chart
- Drag Quarter to Axis
- Drag SalesAmount to Values

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

- Drag ProductName to the Tooltip field well of the visual
- When hovering, product info appears dynamically

11. Sync slicers across multiple report pages:

- Select slicer → Go to View tab → Sync Slicers
- Choose which pages to sync and whether it should be visible or hidden

12. Create a custom visual with dynamic measure selection (Sales vs. Profit):

1. Create a What-If Parameter or disconnected table:

```
{"Sales", "Profit"}
```

2. Use a **DAX measure**:

```
SelectedMeasure =
SWITCH(
     SELECTEDVALUE(MeasureTable[Measure]),
     "Sales", [TotalSales],
     "Profit", [TotalProfit]
)
```

3. Use SelectedMeasure in the visual's Values field

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

- In Fields pane, drag Product under Region, then Quarter under Product
- Use the ↑↓ **drill icons** on the visual to navigate the hierarchy

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

- 1. Place both visuals in the same location
- 2. Use **Selection Pane** to hide one
- 3. Create Bookmark A (showing Visual 1) and Bookmark B (showing Visual 2)
- 4. Add buttons and link them to respective bookmarks

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

- Reduce number of visuals per page
- Avoid high-cardinality visuals (e.g., too many rows in tables)
- Use aggregated data
- Turn off auto page refresh if not needed
- Enable **performance analyzer** (View → Performance Analyzer)