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

   ☐ Bar Chart

   ☐ Line Chart

   ☐ Pie Chart

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

Go to the **Visualizations** pane > click on the **Slicer** icon > drag the field you want to filter by (e.g., Quarter) into the slicer.

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

   ☐ **Bar chart**: horizontal bars (used when category names are long).

   ☐ **Column chart**: vertical bars (commonly used for time-based data).

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

Select the visual > go to the **Format** pane > expand the **General** section > select **Effects** > choose a **Background color**.

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

   It allows users to **navigate to more detailed levels** of data. For example, from Region > Product > Quarter. You can enable it using the **drill-down arrows** or **right-click > drill**.

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.

   ☐ Click the **Slicer** visual

☐ Drag Quarter into the **Field well**

☐ Ensure slicer interaction affects all visuals (via **Format > Edit Interactions**)

8. Format the bar chart to show data labels.

   ☐ Select the **Bar Chart**

   ☐ In the **Format** pane > turn on **Data labels**

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.

   ☐ Create a **Tooltip page**:
   File > Options > Report Settings > Enable Tooltip
   Add a visual with Product, SalesAmount, etc.

   ☐ On the main chart:
   Format > Tooltip > select **Report page** > choose the tooltip page you created

11. Sync slicers across multiple report pages.

   ☐ Select the slicer

   ☐ Go to **View** > **Sync Slicers pane**

   ☐ Choose which pages to **sync** and **show/hide** the slicer

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

- Create a table like:

dax

Measure Selector = DATATABLE("Measure", STRING, {{"Sales"}, {"Profit"}})

- Use a slicer on Measure Selector[Measure]

- Create a measure with SWITCH:

```
Selected Measure =
SWITCH(
  SELECTEDVALUE('Measure Selector'[Measure]),
  "Sales", SUM(Sales[SalesAmount]),
  "Profit", SUM(Sales[Profit])
)
```

- Use Selected Measure in your visuals
-

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

☐ In the Fields pane, drag Product under Region, and Quarter under Product to form a hierarchy

☐ Use this hierarchy in a visual

☐ Enable **drill-down** by clicking the **drill icon** or using **right-click**

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

☐ Create **two visuals** in the same area

☐ Create two **Bookmarks**: one for each visual's visibility

☐ Add **Buttons** with actions > Bookmark

☐ Use buttons to toggle between views

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

Optimize a slow-rendering report with 10+ visuals:

- **Reduce visuals per page**
- Use **Aggregated Tables or Pre-aggregated views**
- **Disable Auto Date/Time**
- Use **Performance Analyzer** to find slow visuals
- Limit use of **complex DAX or too many slicers**
- Turn off **interactions** that aren't needed