

Topic: Creating Basic Visualizations & Adding Interactivity to Visuals

1. What are three types of visuals you can create in Power BI?

→ **Bar chart**, **Line chart**, and **Pie chart** (others include tables, maps, KPIs, etc.)

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

→ Go to the **Visualizations pane** → **Slicer icon**, then drag a field (e.g., *Quarter*) into the slicer's *Field* well.

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

→ **Bar chart** displays data **horizontally**, while a **column chart** displays it **vertically**. They both show comparisons, just in different orientations.

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

→ Select the visual → open the **Format pane** (paint roller icon) → go to **Visual > Background** → turn it on and choose a color.

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

→ It allows users to **explore data hierarchically**, e.g., clicking on a region to see data for products or quarters within that region.

6. Create a bar chart showing SalesAmount by Region.

→ Visual type: **Bar chart**

Fields:

- Axis → Region
 - Values → SalesAmount
-

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

→ Add **Slicer visual** → Field: *Quarter* → then click **"Sync slicers"** in the View tab to apply it across all pages.

8. Format the bar chart to show data labels.

➔ Select the bar chart → **Format pane** → **Data labels** → **On** → adjust font/color as desired.

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

➔ Visual: **Line chart**

- Axis → `Quarter`
 - Values → `SalesAmount`
-

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

➔ Create a **Tooltip page**, add Product details, then enable **Tooltip** under *Format* → *General* → *Tooltip* on your main chart.

11. Sync slicers across multiple report pages.

➔ Go to **View** → **Sync slicers pane** → turn on “Sync” and “Visible” for the same slicer across all pages.

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

➔ Create a **Measure Selector** table (Sales, Profit).

➔ Write DAX:

```
SelectedMetric :=  
SWITCH(  
    SELECTEDVALUE (MeasureSelector[Measure]),  
    "Sales", SUM(Sales[SalesAmount]),  
    "Profit", SUM(Sales[Profit])  
)
```

Then use this measure in visuals.

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

➔ In the **Data view**, drag `Product` and `Quarter` fields under `Region` to create a hierarchy. Enable **Drill Down** on the visual to navigate through levels.

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

➡ Place two visuals in the same spot → Create **Bookmark A** (show first visual, hide second) and **Bookmark B** (reverse) → Add **Buttons** to toggle.

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

- ➡ ☒ Reduce visual count per page
- ☒ Disable unnecessary interactions
- ☒ Use **aggregated data tables**
- ☒ Avoid using too many complex DAX measures
- ☒ Enable **Performance Analyzer** to detect slow visuals