# Lesson 6: Creating Basic Visualizations & Adding Interactivity to Visuals

### 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, select the slicer icon, and choose the field you want to slice by.

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

A bar chart displays data horizontally, while a column chart displays data vertically.

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

Select the visual, go to the Format pane, expand 'Background', and choose your desired color.

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

It allows users to explore data in more detail by navigating hierarchical levels (e.g., from Year to Month).

### 6. Create a bar chart showing SalesAmount by Region.

Use the bar chart visual and drag Region to Axis and SalesAmount to Values.

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

Use a slicer visual, drag Quarter to the field well, and sync it across visuals.

### 8. Format the bar chart to show data labels.

In the Format pane, turn on 'Data labels' under the Data labels section.

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

Select Line chart visual and drag Quarter to Axis and SalesAmount to Values.

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

Drag Product into the Tooltips field of the bar chart.

### 11. Sync slicers across multiple report pages.

Select a slicer, go to 'View' > 'Sync slicers', and enable syncing for desired pages.

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

Create a disconnected table with measure names and use a SWITCH() DAX expression to return selected measure.

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

Create a hierarchy in the Fields pane and use it in the visual. Enable drill-down.

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

Create two visuals, use selection pane to show/hide each, and create bookmarks for each state.

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

Reduce number of visuals, remove unnecessary interactions, and use aggregated data if possible.