# Power BI Visualizations & Interactivity Tasks

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

1. Bar Chart  
2. Line Chart  
3. Pie Chart

## How do you add a slicer to a report?

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

## 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.

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

Select the visual, go to the Format pane, open the 'Background' section, and choose the desired color.

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

Drill-down allows users to explore data in more detail by navigating from higher to lower levels of a hierarchy.

## Create a bar chart showing SalesAmount by Region.

Insert a bar chart, drag 'Region' to the Axis and 'SalesAmount' to the Values.

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

Insert a slicer visual and drag 'Quarter' into the slicer field. Ensure the slicer affects all visuals via 'Edit Interactions'.

## Format the bar chart to show data labels.

Select the bar chart, go to the Format pane, enable 'Data labels'.

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

Insert a line chart, drag 'Quarter' to the Axis and 'SalesAmount' to the Values.

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

Drag 'Product' to the Tooltip field well of the visual.

## Sync slicers across multiple report pages.

Use the 'View' tab to open the Sync Slicers pane and configure slicer syncing across pages.

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

Use a parameter table with a disconnected slicer and SWITCH() in a measure to change the visual based on selection.

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

Create a hierarchy in the Fields pane, then add Region, Product, and Quarter to it in order.

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

Add both visuals, use the Selection pane to show/hide each, create bookmarks for each state, then add buttons to toggle.

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

Reduce visuals per page, use aggregation tables, optimize DAX measures, and enable data reduction techniques.