1. **Task 1: Basic Line Plot**
   * Create a line graph that shows the relationship between x = [1, 2, 3, 4, 5] and y = [2, 4, 6, 8, 10].
   * Label the axes as "X-axis" and "Y-axis".
   * Set the title to "Basic Line Plot".

**Hint:** Use plt.plot() and plt.show().

1. **Task 2: Line Graph with Markers**
   * Create a line graph for x = [0, 1, 2, 3, 4] and y = [0, 1, 4, 9, 16].
   * Add circular markers to the points and connect them with a line.
   * Set the title as "Line Plot with Markers".

**Hint:** Use plt.plot(x, y, marker='o').

1. **Task 3: Multiple Line Plots**
   * Plot two lines on the same graph:
     + Line 1: x = [1, 2, 3, 4] and y1 = [1, 4, 9, 16]
     + Line 2: x = [1, 2, 3, 4] and y2 = [2, 3, 6, 8]
   * Use different colors and line styles for each line (e.g., one dashed line and one solid line).
   * Add a legend to differentiate the lines.

**Hint:** Use plt.plot() twice and add plt.legend().

1. **Task 4: Subplots with Line Graphs**
   * Create two separate line graphs in one figure:
     + First graph: x = [1, 2, 3, 4, 5] and y = [1, 4, 9, 16, 25]
     + Second graph: x = [1, 2, 3, 4, 5] and y = [2, 4, 6, 8, 10]
   * Use plt.figure() and plt.subplot() to place the graphs side by side.

**Hint:** Use plt.figure() to create a new figure, and plt.subplot(1, 2, 1) for the first plot and plt.subplot(1, 2, 2) for the second.

**Bar Graph Tasks:**

1. **Task 5: Basic Bar Plot**
   * Create a bar plot with categories ['A', 'B', 'C', 'D'] and values [5, 7, 3, 8].
   * Label the x-axis as "Categories" and the y-axis as "Values".
   * Add a title: "Basic Bar Plot".

**Hint:** Use plt.bar() for bar plots.

1. **Task 6: Horizontal Bar Plot**
   * Create a horizontal bar plot for categories ['E', 'F', 'G', 'H'] and values [8, 4, 6, 3].
   * Set the title to "Horizontal Bar Plot".

**Hint:** Use plt.barh() for horizontal bar plots.

1. **Task 7: Bar Plot with Annotations**
   * Create a bar plot with categories = ['X', 'Y', 'Z'] and values = [7, 2, 5].
   * Annotate each bar with its height.

**Hint:** Use plt.bar() and plt.annotate() to annotate.

**Tasks Involving plt.figure():**

1. **Task 8: Create Two Figures with Different Plots**
   * In one figure, create a line plot for x = [1, 2, 3, 4] and y = [1, 4, 9, 16].
   * In a second figure, create a bar plot for labels = ['A', 'B', 'C'] and values = [5, 7, 9].

**Hint:** Use plt.figure() twice to create separate figures.

1. **Task 9: Adjust Figure Size**
   * Create a line plot for x = [1, 2, 3, 4, 5] and y = [5, 3, 8, 7, 4].
   * Change the size of the figure to 10x6 inches using plt.figure(figsize=(10, 6)).
   * Add appropriate labels and a title.

**Hint:** Pass the figsize parameter inside plt.figure().

1. **Task 10: Save a Figure to File**
   * Create a simple bar plot with labels = ['Red', 'Blue', 'Green'] and values = [10, 7, 5].
   * Save the plot to a file named "bar\_plot.png" using plt.savefig().

**Hint:** Use plt.savefig('filename.png') after creating the plot but before calling plt.show().