problems based on line plots using Matplotlib's `pyplot` module:

### 1. Plotting a Linear Function

Create a line plot of the linear function $y = 2x + 3$ for $x$ values ranging from -10 to 10.

### 2. Plotting Multiple Functions

Plot the functions $y = x^2$ and $y = \sqrt{x}$ on the same plot for $x$ values ranging from 0 to 10. Use different line styles or colors for each function.

### 3. Plotting Trigonometric Functions

Create a line plot showing the functions $y = \sin(x)$, $y = \cos(x)$, and $y = \tan(x)$ for $x$ values ranging from 0 to $2\pi$.

### 4. Plotting Exponential Growth

Plot the function $y = e^x$ for $x$ values ranging from -5 to 5.

### 5. Plotting Piecewise Functions

Create a line plot of the piecewise function $f(x) = \begin{cases} -1 & \text{if } x < 0 \\ 1 & \text{if } x \geq 0 \end{cases}$ for $x$ values ranging from -2 to 2.

### 6. Plotting Parametric Equations

Create a line plot of the parametric equations $x = \cos(t)$ and $y = \sin(t)$ for $t$ values ranging from 0 to $2\pi$.

### 7. Plotting Logarithmic Functions

Plot the functions $y = \log(x)$ and $y = \log_{10}(x)$ for $x$ values ranging from 0.1 to 10.

### 8. Plotting Step Function

Create a line plot of the step function $f(x) = \begin{cases} 0 & \text{if } x < 0 \\ 1 & \text{if } x \geq 0 \end{cases}$ for $x$ values ranging from -5 to 5.


### 9. Plotting Polynomial Functions

Plot the polynomial function $y = x^3 - 2x^2 + x - 1$ for $x$ values ranging from -3 to 3.


### 10. Plotting Piecewise Linear Functions

Create a line plot of the piecewise linear function $f(x) = \begin{cases} -x & \text{if } x \leq 0 \\ x & \text{if } x > 0 \end{cases}$ for $x$ values ranging from -2 to 2.