

```
import matplotlib.pyplot as plt
import numpy as np

# Generate random data
x = np.linspace(0, 10, 100) # 100 points from 0 to 10
y = np.sin(x) # Sine function values

# Create a line plot
plt.plot(x, y, label='Sine Function')

# Add labels and title
plt.xlabel('X-axis')
plt.ylabel('Y-axis')
plt.title('Simple Line Plot')

# Add a legend
plt.legend()

# Show the plot
plt.show()
```

