

Write a Python program to create multiple plots

```
import matplotlib.pyplot as plt

import numpy as np

# Generate some sample data
x = np.linspace(0, 10, 100)
y1 = np.sin(x)
y2 = np.cos(x)
y3 = np.tan(x)

# Create multiple plots
plt.figure(figsize=(12, 6))

# Plot 1
plt.subplot(2, 2, 1) # 2 rows, 2 columns, plot number 1
plt.plot(x, y1, label='sin(x)')
plt.title('Plot 1')
plt.legend()

# Plot 2
plt.subplot(2, 2, 2) # 2 rows, 2 columns, plot number 2
plt.plot(x, y2, label='cos(x)', color='orange')
plt.title('Plot 2')
plt.legend()

# Plot 3
```

```
plt.subplot(2, 2, 3) # 2 rows, 2 columns, plot number 3
```

```
plt.plot(x, y3, label='tan(x)', color='green')
```

```
plt.title('Plot 3')
```

```
plt.legend()
```

```
# Show the plots
```

```
plt.tight_layout() # Adjust layout to prevent overlapping
```

```
plt.show()
```

OUTPUT:

