

practical_9

February 13, 2024

Generate different subplots from a given plot and color plot data.

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[1]: import numpy as np
import matplotlib.pyplot as plt

# Generate data for plotting
x = np.linspace(0, 10, 100) # Generate 100 evenly spaced points from 0 to 10
y1 = np.sin(x) # Sine function values
y2 = np.cos(x) # Cosine function values

# Create a figure and subplots
fig, axs = plt.subplots(2, 1, figsize=(8, 10))

# Plot data on the first subplot
axs[0].plot(x, y1, label='Sin', color='blue')
axs[0].set_title('Sine Function')
axs[0].set_xlabel('X')
axs[0].set_ylabel('Y')
axs[0].legend()
axs[0].grid(True)

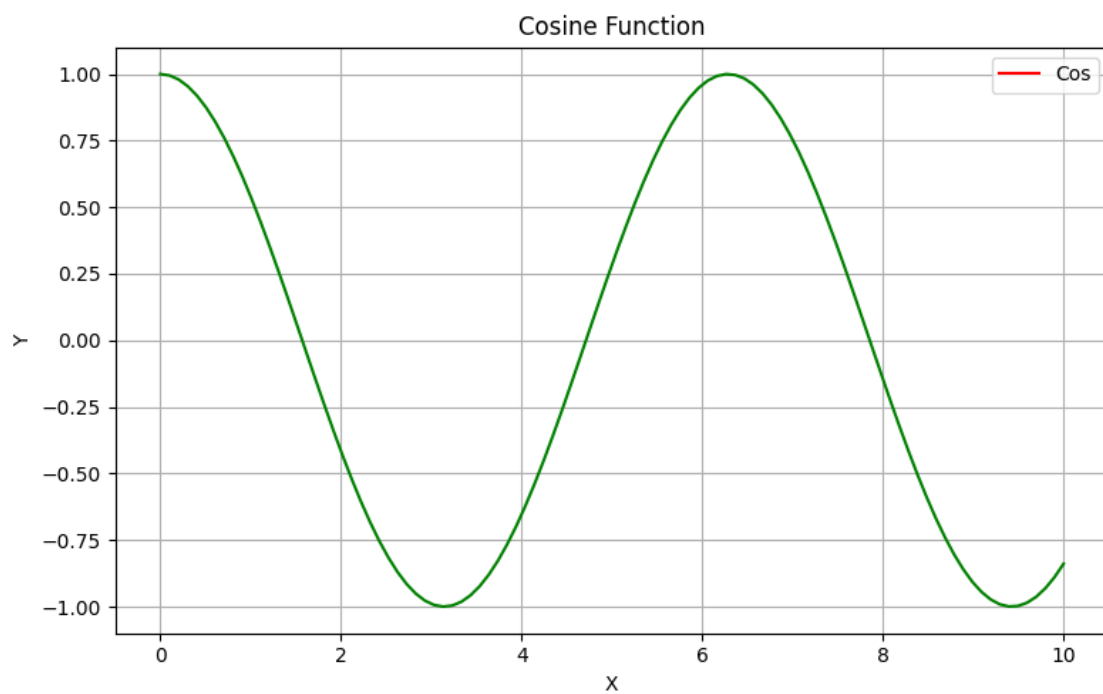
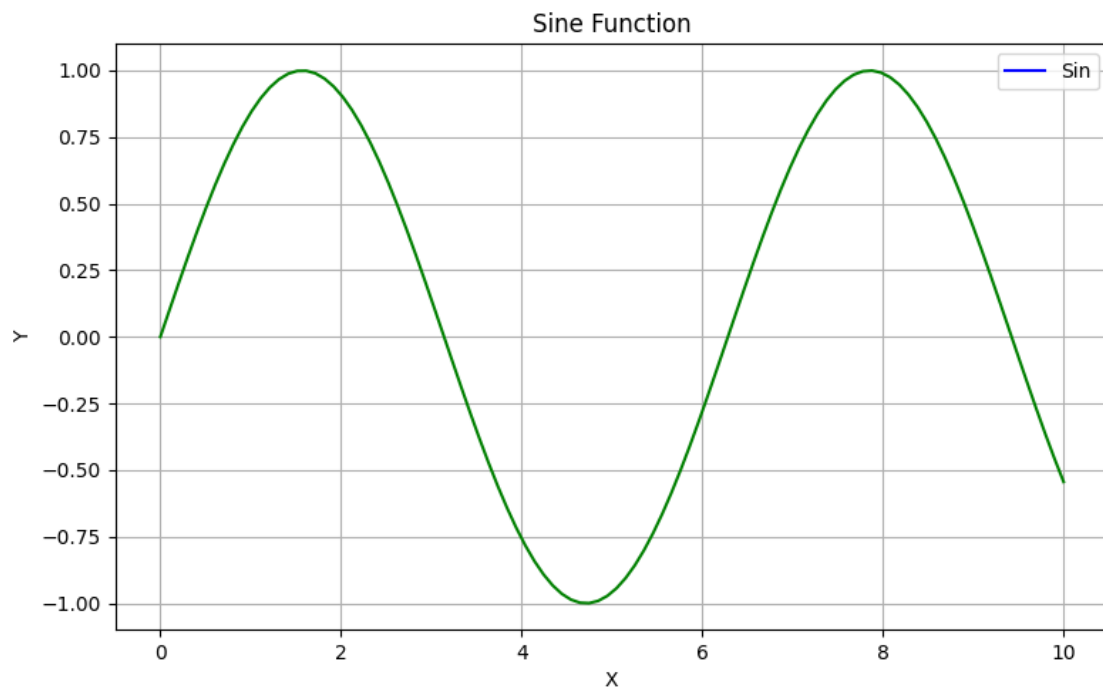
# Plot data on the second subplot
axs[1].plot(x, y2, label='Cos', color='red')
axs[1].set_title('Cosine Function')
axs[1].set_xlabel('X')
axs[1].set_ylabel('Y')
axs[1].legend()
axs[1].grid(True)

# Adjust layout
plt.tight_layout()

# Color the plot data
for ax in axs:
    for line in ax.lines:
        line.set_color('green')

# Show the plots
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plt.show()
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