import numpy as np

import matplotlib.pyplot as plt

import seaborn as sns

data = np.random.normal(loc=0, scale=1, size=1000)

# Create a histogram

plt.figure(figsize=(10, 6))

plt.hist(data, bins=30, edgecolor='black', alpha=0.7)

plt.xlabel('Value')

plt.ylabel('Frequency')

plt.title('Histogram of Value Frequency')

plt.grid(True)

plt.show()

# Create a density plot

plt.figure(figsize=(10, 6))

sns.kdeplot(data, fill=True)

plt.xlabel('Value')

plt.ylabel('Density')

plt.title('Density Plot of Continuous Probability Distribution')

plt.grid(True)

plt.show()