import pandas as pd

import numpy as np

import matplotlib.pyplot as plt

import seaborn as sns

np.random.seed(0)

data = {

'Category': np.random.choice(['A', 'B', 'C', 'D', 'E'], 100),

'Value': np.random.randn(100)

}

df = pd.DataFrame(data)

# Create a box plot

plt.figure(figsize=(12, 6))

sns.boxplot(x='Category', y='Value', data=df)

plt.xlabel('Category')

plt.ylabel('Value')

plt.title('Box Plot of Value by Category')

plt.grid(True)

plt.show()