import numpy as np

# 1D array

arr\_1d = np.array([1, 2, 3, 4, 5])

print("1D Array:")

print("Mean:", np.mean(arr\_1d))

print("Median:", np.median(arr\_1d))

print("Standard Deviation:", np.std(arr\_1d))

print("Variance:", np.var(arr\_1d))

print()

# 2D array

arr\_2d = np.array([[1, 2, 3], [4, 5, 6], [7, 8, 9]])

print("2D Array:")

print("Mean along axis 0:", np.mean(arr\_2d, axis=0))

print("Mean along axis 1:", np.mean(arr\_2d, axis=1))

print("Median along axis 0:", np.median(arr\_2d, axis=0))

print("Median along axis 1:", np.median(arr\_2d, axis=1))

print("Standard Deviation along axis 0:", np.std(arr\_2d, axis=0))

print("Standard Deviation along axis 1:", np.std(arr\_2d, axis=1))

print("Variance along axis 0:", np.var(arr\_2d, axis=0))

print("Variance along axis 1:", np.var(arr\_2d, axis=1))