import numpy as np

def spearman\_corr(x, y):

#rank the data

x\_rank = np.argsort(np.argsort(x))

y\_rank = np.argsort(np.argsort(y))

#calculate the Pearson correlation coefficient on the ranks r np.corrcoef(x\_rank, y\_rank) [0, 1]

#calculate the Spearman correlation coefficient

n = len(x)

rho=1 - 6 np. sum((x\_rank - y\_rank)\*\*2)/(n\*(n\*\*2 - 1))

#Alternate way

#from scipy.stats import spearmanr

#rho, spearmanr(x, y)

return rho

[25] x np.array([1, 2, 3, 4, 5])

y= np.array([2, 4, 6, 8, 10])

rho spearman\_corr(x, y)

print("Spearman's correlation coefficient: ", rho)

Spearman's correlation coefficient: 1.0.