**CURVE FITTING METHOD**

import numpy as np

n = int(input("How many points="))

x = np.zeros(n)

y = np.zeros(n)

print("Enter data:")

for i in range(n):

x[i] = float(input("x[%d]="% i))

y[i] = float(input("y[%d]="% i))

sumX,sumX2,sumY,sumXY=0,0,0,0

for i in range(n):

sumX = sumX + x[i]

sumX2 = sumX2 + x[i]\*x[i]

sumY = sumY + y[i]

sumXY = sumXY+x[i]\*y[i]

d=(sumX\*sumX-n\*sumX2)

da=(sumY\*sumX-n\*sumXY)

db=(sumX\*sumXY-sumY\*sumX2)

a=da/d

b=db/d

print("\ncoefficient are:")

print("a:", a)

print("b:", b)

print('And equation is: y=%0.4fX+%0.4f'%(a,b))

