

```

data = [
    [1200, 3, 300000],
    [1500, 4, 400000],
    [800, 2, 200000],
    [2000, 5, 500000],
    [1000, 3, 250000]
]

X = [row[0] for row in data]
y = [row[2] for row in data]
n = len(X)
x_mean = sum(X)/n
y_mean = sum(y)/n
num = sum((X[i]-x_mean)*(y[i]-y_mean) for i in range(n))
den = sum((X[i]-x_mean)**2 for i in range(n))

m = num/den
c = y_mean - m*x_mean
y_pred = [m*X[i]+c for i in range(n)]

print("Slope:", m, "Intercept:", c)
print("Predicted Prices:", y_pred)

```

OUTPUT:

```

IDLE Shell 3.13.9
File Edit Shell Debug Options Window Help
Python 3.13.9 (tags/v3.13.9:8183fa5, Oct 14 2025, 14:09:13) [MSC v.1944 64 bit (AMD64)] on win32
Enter "help" below or click "Help" above for more information.

>>> ====== RESTART: C:/Users/prast/OneDrive/Desktop/ML LAB/EXP 14.py ======
Slope: 255.68181818182 Intercept: -2386.363636363647
Predicted Prices: [304431.81818182, 381136.36363636365, 202159.0909090909, 508977.2727272727, 253295.45454545453]
>>>

```