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In [2]: import numpy as np
import math
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In [3]: n = 5 #number of inputs
one_input = []
full_input = []
sum = 0
```

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In [4]: for _ in range(5):
        a = input("Enter value of x :")
        b = input("Enter value of y :")
        full_input.append((a,b))
```

```
Enter value of x :-2
Enter value of y :2
Enter value of x :2
Enter value of y :4
Enter value of x :3
Enter value of y :8
Enter value of x :5
Enter value of y :11
Enter value of x :4
Enter value of y :17
```

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In [6]: full_input = np.asarray(full_input,dtype = float)
```

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In [7]: y_sum, x_sum, x_y_sum, x_x_sum = 0, 0, 0, 0
for i in range(n):
    y_sum += full_input[i][1]
    x_sum += full_input[i][0]
    x_y_sum += full_input[i][0] * full_input[i][1]
    x_x_sum += full_input[i][0] ** 2
```

```
In [8]: #Coefficient Matrix for solving linear eqautions
A = np.asarray([[n,x_sum],[x_sum,x_x_sum]]) #2*2
B = np.asarray([[y_sum],[x_y_sum]])
X = np.linalg.solve(A, B)
```

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In [11]: print("b0: {:.2f}, b1: {:.2f}".format(X[0][0],X[1][0]))
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b0: 4.27, b1: 1.72
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