

OUTPUT:

Lagrange interpolation

```
PS D:\BCA\BCA_4thsem\NumericalMethods\output> & .\'lagrange.exe'
Enter how many data you want:
3
Enter the value of X: -2
Enter the value of Y: -20
Enter the value of X: 0
Enter the value of Y: 2
Enter the value of X: 6
Enter the value of Y: 70

What value do u want?
-1

Your result: -9.041667
PS D:\BCA\BCA_4thsem\NumericalMethods\output> & .\'lagrange.exe'
Enter how many data you want:
3
Enter the value of X: -2
Enter the value of Y: -20
Enter the value of X: 0
Enter the value of Y: 2
Enter the value of X: 6
Enter the value of Y: 70

What value do u want?
1

Your result: 13.125000
```

Least square method (linear regression $y=a+bx$)

```
PS D:\BCA\BCA_4thsem\NumericalMethods\output> & .\'least.exe'
Enter the number of data:
6
Enter value for X:-2
Enter value for Y:-0.4
Enter value for X:-1
Enter value for Y:1.2
Enter value for X:0.5
Enter value for Y:3.5
Enter value for X:2
Enter value for Y:6
Enter value for X:3
Enter value for Y:7.4
Enter value for X:5.5
Enter value for Y:11
2.746916
1.527313
y=2.746916 + 1.527313x
```