## **Input:**

X	24	28	32	36	40
F(x)	28.06	30.19	32.75	34.94	40

## **Output:**

```
 \verb|C:\Users\Dell\Desktop\Roshan NM>cd "c:\Users\Dell\Desktop\Roshan NM>cd "c:\Users\Desktop\Roshan NM>cd "c:\U
Input the number of data pairs: 5
Input data pairs of x and f(x)
x[1]: 24
f[1]: 28.06
x[2]: 28
f[2]: 30.19
x[3]: 32
f[3]: 32.75
x[4]: 36
f[4]: 34.94
x[5]: 40
f[5]: 40
Enter the value at which interpolation is required: 33
Interpolated function value at x = 33 is 33.274666
 Do you want to input another value? (y/n):
```

## **Input:**

X	0.7	0.3	0.5	0.7	0.9	1.1	1.3
F(x)	0.003	0.067	0.148	0.248	0.370	0.518	0.697

## **Output:**

```
C:\Users\Dell\Desktop\Roshan NM>cd "c:\Users\Dell\Desktop\Roshan
11\Desktop\Roshan NM\Unit 2\"BackwardNewton
Input the number of data pairs: 7
Input data pairs of x and f(x)
x[1]: 0.1
f[1]: 0.003
x[2]: 0.3
f[2]: 0.067
x[3]: 0.5
f[3]: 0.148
x[4]: 0.7
f[4]: 0.248
x[5]: 0.9
f[5]: 0.370
x[6]: 1.1
f[6]: 0.518
x[7]: 1.3
f[7]: 0.697
Enter the value at which interpolation is required: 0.6
Interpolated function value at x = 0.6 is 0.195461
Do you want to input another value? (y/n):
```