```
C:\practicals 3rd sem\Numercial methods>cd "c:\practicals 3rd sem\N
.c -o derivative_using_newton_divided_difference && "c:\practicals
e
Enter the number of points:5
Enter the value at which derivative is required:10
Values of X and f(X) at i = 0
3 -13
Values of X and f(X) at i = 1
5 23
Values of X and f(X) at i = 2
11 899
Values of X and f(X) at i = 3
27 17315
Values of X and f(X) at i = 4
34 35606
The Value of first derivative is: 233.000
```

```
c:\practicals 3rd sem\Numercial methods\NM>cd "c:\practical
e_using_forward && "c:\practicals 3rd sem\Numercial methods
Enter the number of points:5
Enter the value at which derivative is required:1.1
Values of X and f(X) at i = 0
1.0 7.989
Values of X and f(X) at i = 1
1.1 8.403
Values of X and f(X) at i = 2
1.2 8.781
Values of X and f(X) at i = 3
1.3 9.129
Values of X and f(X) at i = 4
1.4 9.451
The Value of first derivative is: 3.948338
```

```
c:\practicals 3rd sem\Numercial methods\NM>cd "c:\practicals
ve_using_backward && "c:\practicals 3rd sem\Numercial methods
Enter the number of points:5
Enter the value at which derivative is required:1.5
Values of X and f(X) at i = 0
1.0 7.989
Values of X and f(X) at i = 1
1.1 8.403
Values of X and f(X) at i = 2
1.2 8.781
Values of X and f(X) at i = 3
1.3 9.129
Values of X and f(X) at i = 4
1.4 9.451
The Value of first derivative   is: 2.861767
```

```
c:\practicals 3rd sem\Numercial methods\NM>cd "c:\practicals 3rd sem\Numercial methods
cticals 3rd sem\Numercial methods\NM\"simpson1by3
Enter the lower and upper limits: 0 1
Enter the number of intervals: 10
Choose the method:
1. Simpson's 1/3 Rule
2. Composite Simpson's 1/3 Rule
3. Exit!
Enter your choice: 1
The value of integration using Simpson's 1/3 Rule is: 1.718283
Enter the lower and upper limits: 0 2
Enter the number of intervals: 10
Choose the method:
1. Simpson's 1/3 Rule
2. Composite Simpson's 1/3 Rule
3. Exit!
Enter your choice: 2
The value of integration using Composite Simpson's 1/3 Rule is: 6.389114
```

```
c:\practicals 3rd sem\Numercial methods\NM>cd "c:\practicals 3rd sem\Numercial
cticals 3rd sem\Numercial methods\NM\"simpson3by8
Enter the lower and upper limits: 0 1
Enter the number of intervals: 10
Choose the method:
1. Simpson's 3/8 Rule
2. Composite Simpson's 3/8 Rule
3. Exit!
Enter your choice: 1
The value of integration using Simpson's 3/8 Rule is: 1.653776
Enter the lower and upper limits: 1 2
Enter the number of intervals: 10
Choose the method:
1. Simpson's 3/8 Rule
2. Composite Simpson's 3/8 Rule
3. Exit!
Enter your choice: 2
The value of integration using Composite Simpson's 3/8 Rule is: 4.495429
```

```
c:\practicals 3rd sem\Numercial methods\NM>cd "c:\practicals 3rd sem
&& "c:\practicals 3rd sem\Numercial methods\NM\"trapezoidal_rule
Enter the lower and upper limits: 0 1
Enter the number of intervals: 10
Choose the method:
1. Normal Trapezoidal Rule
2. Composite Trapezoidal Rule
Enter your choice: 1
The value of integration is: 1.719714
Do you want to continue? (1: Yes, 0: No): 1
Enter the lower and upper limits: 0 2
Enter the number of intervals: 10
Choose the method:
1. Normal Trapezoidal Rule
2. Composite Trapezoidal Rule
Enter your choice: 2
The value of integration is: 6.410339
Do you want to continue? (1: Yes, 0: No): 0
```

```
c:\practicals 3rd sem\Numercial methods\NM>cd "c:\pr
ation && "c:\practicals 3rd sem\Numercial methods\NM
Enter Lower and Upper Limit:
1 2
Enter p & q of required T(p,q):2 2
Value of Romberg's Integration is:0.693
```

```
c:\practicals 3rd sem\DSA\programs\Lab-2>g++ linearQueue(array).c

c:\practicals 3rd sem\DSA\programs\Lab-2>a.exe
1.Insert element to queue
2.Delete element from queue
3.Display all elements of queue
4.Quit
Enter your choice : 1
Enter the element to insert in queue : 2
1.Insert element to queue
2.Delete element from queue
3.Display all elements of queue
4.Quit
Enter your choice : 1
Enter the element to insert in queue : 3
1.Insert element to queue
2.Delete element from queue
3.Display all elements of queue
4.Quit
Enter your choice : 2
Deleted element from queue is : 2
1.Insert element to queue
2.Delete element from queue
3.Display all elements of queue
4.Quit
Enter your choice : 3
Elements inside the Queue is :
3
1.Insert element to queue
2.Delete element from queue
3.Display all elements of queue
4.Quit
Enter your choice : 4
```