

```
main.c
1  #include <stdio.h>
2
3  int front=-1;
4  int rear=-1;
5
6  void insert(int n,int q[],int ele)
7  {if(rear==n-1)
8  { printf("Queue overflow");}
9  else
10 { rear++;
11  q[rear]=ele;
12  if(front==n-1)
13  front++;}
14 }
15
16 int delete( int q[])
17 { int ele;
18  if(front==n-1)
19  printf("Queue underflow\n");
20  else
21  { ele=q[front];
22  front++;
23  if(front>rear)
24  { front=-1;
25  rear=-1; }
26  return ele;
27  }
28  return -999;
29 }
30
31 void display(int q[])
32 {
33  int i;
34  for(i=front;i<=rear;i++)
35  printf("%d\t",q[i]);
36  printf("\n");
37 }
```

```
1. Insert to Queue
2. Delete from the Queue
3. Display Queue
4. Exit
Enter the choice :1
Enter the element
1

1. Insert to Queue
2. Delete from the Queue
3. Display Queue
4. Exit
Enter the choice :1
Enter the element
2

1. Insert to Queue
2. Delete from the Queue
3. Display Queue
4. Exit
Enter the choice :1
Enter the element
3

1. Insert to Queue
2. Delete from the Queue
3. Display Queue
4. Exit
Enter the choice :1
Enter the element
4
```

```
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1  #include <stdio.h>
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10 { rear++;
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16 int delete( int q[])
17 { int ele;
18  if(front==n-1)
19  printf("Queue underflow\n");
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21  { ele=q[front];
22  front++;
23  if(front>rear)
24  { front=-1;
25  rear=-1; }
26  return ele;
27  }
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29 }
30
31 void display(int q[])
32 {
33  int i;
34  for(i=front;i<=rear;i++)
35  printf("%d\t",q[i]);
36  printf("\n");
37 }
```

```
3. Display Queue
4. Exit
Enter the choice :1
Enter the element
5

1. Insert to Queue
2. Delete from the Queue
3. Display Queue
4. Exit
Enter the choice :1
Enter the element
6
Queue overflow
1. Insert to Queue
2. Delete from the Queue
3. Display Queue
4. Exit
Enter the choice :3
12345
1. Insert to Queue
2. Delete from the Queue
3. Display Queue
4. Exit
Enter the choice :2
Removed Element : 1
1. Insert to Queue
2. Delete from the Queue
3. Display Queue
4. Exit
Enter the choice :2
Removed Element : 2
1. Insert to Queue
2. Delete from the Queue
3. Display Queue
4. Exit
Enter the choice :2
```

```
main.c
1  #include <stdio.h>
2
3  int front=-1;
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7  {if(rear==n-1)
8  { printf("Queue overflow");}
9  else
10 { rear++;
11  q[rear]=ele;
12  if(front==n-1)
13  front++;}
14 }
15
16 int delete( int q[])
17 { int ele;
18  if(front==n-1)
19  printf("Queue underflow\n");
20  else
21  { ele=q[front];
22  front++;
23  if(front>rear)
24  { front=-1;
25  rear=-1; }
26  return ele;
27  }
28  return -999;
29 }
30
31 void display(int q[])
32 {
33  int i;
34  for(i=front;i<=rear;i++)
35  printf("%d\t",q[i]);
36  printf("\n");
37 }
```

```
2. Delete from the Queue
3. Display Queue
4. Exit
Enter the choice :2
Removed Element : 2
1. Insert to Queue
2. Delete from the Queue
3. Display Queue
4. Exit
Enter the choice :2
Removed Element : 3
1. Insert to Queue
2. Delete from the Queue
3. Display Queue
4. Exit
Enter the choice :2
Removed Element : 4
1. Insert to Queue
2. Delete from the Queue
3. Display Queue
4. Exit
Enter the choice :2
Removed Element : 5
1. Insert to Queue
2. Delete from the Queue
3. Display Queue
4. Exit
Enter the choice :2
Queue underflow
Queue is empty

1. Insert to Queue
2. Delete from the Queue
3. Display Queue
4. Exit
Enter the choice :4
```