

```

1  #include <stdio.h>
2  #define SIZE 5
3
4  void enqueue(int);
5  void dequeue();
6  void display();
7
8  int items[SIZE], front = -1, rear = -1;
9
10 int main() {
11     dequeue();
12     enqueue(1);
13     enqueue(2);
14     enqueue(3);
15     enqueue(4);
16     enqueue(5);
17     enqueue(6);
18
19     display();
20     dequeue();
21     display();
22     return 0;
23 }
24 void enqueue(int value) {
25     if (rear == SIZE - 1)
26         printf("\nQueue is Full!!");
27     else {
28         if (front == -1)
29             front = 0;
30         rear++;
31         items[rear] = value;
32         printf("\nInserted -> %d", value);
33     }
34 }

```

```

Queue is Empty!!
Inserted -> 1
Inserted -> 2
Inserted -> 3
Inserted -> 4
Inserted -> 5
Queue is Full!!
Queue elements are:
1 2 3 4 5

Deleted : 1
Queue elements are:
2 3 4 5

```

```
35 void deQueue() {
36     if (front == -1)
37         printf("\nQueue is Empty!!");
38     else {
39         printf("\nDeleted : %d", items[front]);
40         front++;
41         if (front > rear)
42             front = rear = -1;
43     }
44 }
45 void display() {
46     if (rear == -1)
47         printf("\nQueue is Empty!!!");
48     else {
49         int i;
50         printf("\nQueue elements are:\n");
51         for (i = front; i <= rear; i++)
52             printf("%d ", items[i]);
53     }
54     printf("\n");
55 }
```