

```
}

else
{
    printf("Element deleted from the queue is %d\n",queue[front]);
    front=front+1;
}
}

void display()
{
    int i;
    if(front==-1)
        printf("Queue is empty\n");
    else
    {
        printf("Queue is: ");
        for(i=front;i<=rear;i++)
            printf("%d \t",queue[i]);
        printf("\n");
    }
}
```

```
1 #include<stdio.h>
2 #include<stdlib.h>
3 #define size 50
4
5 int queue[size];
6 int rear=-1;
7 int front=-1;
8
9 void insert()
10 {
11     int x;
12     if(rear==size-1)
13         printf("Queue overflow\n");
14     else
15     {
16         if(front==-1)
17             front=0;
18         printf("Insert an element in queue: ");
19         scanf("%d",&x);
20         rear=rear+1;
21         queue[rear] = x;
22     }
23 }
24
25
26 void delete()
27 {
28
29     if(front== -1 || front > rear)
30     {
31         printf("queue is underflow\n");
32         return;
33     }
```

```
55
56
57 void main()
58 {
59     int ch;
60     while(1)
61     {
62         printf("\n");
63         printf("1:Insert an element\n");
64         printf("2>Delete an element\n");
65         printf("3:Display an element\n");
66         printf("4:Exit \n");
67         printf("Enter your choice\n");
68         scanf("%d",&ch);
69         switch(ch)
70         {
71             case 1:
72                 insert();
73                 break;
74
75             case 2:
76                 delete();
77                 break;
78
79             case 3:
80                 display();
81                 break;
82
83             case 4:
84                 exit(1);
85                 break;
86
87             default:
```

```
87  
88     default:  
89         printf("Wrong choice\n");  
90     }  
91 }
```

1:Insert an element  
2>Delete an element  
3:Display an element  
4:Exit  
Enter your choice  
1  
Insert an element in queue: 6

1:Insert an element  
2>Delete an element  
3:Display an element  
4:Exit  
Enter your choice  
1  
Insert an element in queue: 8

1:Insert an element  
2>Delete an element  
3:Display an element  
4:Exit  
Enter your choice  
3  
Queue is: 6 8

1:Insert an element  
2>Delete an element  
3:Display an element  
4:Exit  
Enter your choice  
2  
Element deleted from the queue is 6

1:Insert an element  
2>Delete an element  
3:Display an element  
4:Exit  
Enter your choice  
3

1:Insert an element  
2>Delete an element  
3:Display an element  
4:Exit

Enter your choice  
1

Insert an element in queue: 8

1:Insert an element  
2>Delete an element  
3:Display an element  
4:Exit

Enter your choice  
3

Queue is: 6 8

1:Insert an element  
2>Delete an element  
3:Display an element  
4:Exit

Enter your choice  
2

Element deleted from the queue is 6

1:Insert an element  
2>Delete an element  
3:Display an element  
4:Exit

Enter your choice  
3

Queue is: 8

1:Insert an element  
2>Delete an element  
3:Display an element  
4:Exit

Enter your choice  
4