

```

75 - {
76     front1 = front;
77
78     if ((front1 == NULL) && (rear == NULL))
79     {
80         printf("Queue is empty");
81         return;
82     }
83     while (front1 != rear)
84     {
85         printf("%d ", front1->info);
86         front1 = front1->ptr;
87     }
88     if (front1 == rear)
89         printf("%d", front1->info);
90 }
91
92
93 void deq()
94 {
95     front1 = front;
96
97     if (front1 == NULL)
98     {
99         printf("\n queue underflow");
100        return;
101    }
102    else
103        if (front1->ptr != NULL)
104        {
105            front1 = front1->ptr;
106            printf("\n Dequed value : %d", front->info);
107            free(front);
108            front = front1;
109        }
110        else
111        {
112            printf("\n Dequed value : %d", front->info);
113            free(front);
114            front = NULL;
115            rear = NULL;
116        }
117        count--;
118 }

```

```
40     case 3:display();
41         break;
42
43     case 4: exit(0);
44
45     default:
46         printf("Wrong choice, Please enter correct choice ");
47         break;
48     }
49 }
50 }
51
52 void enq(int data)
53 {
54     if (rear == NULL)
55     {
56         rear = (struct node *)malloc(1*sizeof(struct node));
57         rear->ptr = NULL;
58         rear->info = data;
59         front = rear;
60     }
61     else
62     {
63         temp=(struct node *)malloc(1*sizeof(struct node));
64         rear->ptr = temp;
65         temp->info = data;
66         temp->ptr = NULL;
67
68         rear = temp;
69     }
70     count++;
71 }
72
73
74 void display()
75 {
76     front1 = front;
77
78     if ((front1 == NULL) && (rear == NULL))
79     {
80         printf("Queue is empty");
81         return;
82     }
83     while (front1 != rear)
```

```

1  #include <stdio.h>
2  #include <stdlib.h>
3
4  struct node
5  {
6      int info;
7      struct node *ptr;
8  }*front,*rear,*temp,*front1;
9
10 int frontelement();
11 void enq(int data);
12 void deq();
13 void display();
14
15 int count = 0;
16
17 void main()
18 {
19     int no, ch, e;
20
21     printf("\n 1 - Enqueue");
22     printf("\n 2 - Dequeue");
23     printf("\n 3 - Display");
24     printf("\n 4 - Exit");
25
26     while (1)
27     {
28         printf("\n Enter choice : ");
29         scanf("%d", &ch);
30         switch (ch)
31         {
32             case 1:
33                 printf("Enter data : ");
34                 scanf("%d", &no);
35                 enq(no);
36                 break;
37             case 2:
38                 deq();
39                 break;
40             case 3: display();
41                 break;
42
43             case 4: exit(0);
44

```