

```

C linearqueues.c > displayq()
1  #include<stdio.h>
2  #include<stdlib.h>
3  #define que_size 3
4  int item,front=0,rear=-1,q[que_size];
5  void insertrear(){
6      if(rear==que_size-1)
7      {
8          printf("queue overflow");
9          return;
10     }
11
12     q[++rear]=item;
13 }
14 int deletefront(){
15     if(front>rear){
16         front = 0;
17         rear = -1;
18         return -1;
19     }
20     return q[front++];
21 }
22 void displayq(){
23     int i;
24     if(front>rear)
25     {
26         printf("queue is empty");
27         return;
28     }
29     printf("contents of queue \n");
30     for(i=front;i<=rear;i++)
31     {
32         printf("%d\n",q[i]);
33     }
34 }
35 int main(){
36     int choice;
37     for(;;)
38     {

```

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```
27     return;
28 }
29 printf("contents of queue \n");
30 for(i=front;i<=rear;i++)
31 {
32     printf("%d\n",q[i]);
33 }
34 }
35 int main(){
36     int choice;
37     for(;;)
38     {
39         printf("1.Insert rear \n2.Delete front \n3.Display \n4.exit \n ");
40         printf("Enter the choice : ");
41         scanf("%d",&choice);
42         switch(choice)
43         {
44             case 1: printf("Enter the item\n");
45                     scanf("%d",&item);
46                     insertrear();
47                     break;
48             case 2:item=deletefront();
49                     if(item==-1)
50                         printf("queue is empty\n");
51                     else
52                         printf("item deleted is %d \n",item);
53                     break;
54             case 3:displayq();
55                     break;
56             default:exit(0);
57         }
58     }
59 }
```

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27 return;

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

1: Code

```
1.Insert rear
2.Delete front
3.Display
4.exit
Enter the choice : 1
Enter the item
10
1.Insert rear
2.Delete front
3.Display
4.exit
Enter the choice : 1
Enter the item
20
1.Insert rear
2.Delete front
3.Display
4.exit
Enter the choice : 1
Enter the item
30
1.Insert rear
2.Delete front
3.Display
4.exit
Enter the choice : 2
item deleted is 10
1.Insert rear
2.Delete front
3.Display
4.exit
Enter the choice : 3
contents of queue
20
30
1.Insert rear
2.Delete front
3.Display
4.exit
Enter the choice : █
```