

q.c - Code::Blocks 20.03

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Start here x gcd.c x q.c x

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

```

39 void main()
40 {
41     int choice;
42     for(;;)
43     {
44         printf("\n 1:Insertion\n 2:Deletion\n 3:Display\n 4:Exit\n");
45         printf("Enter your choice\n");
46         scanf("%d",&choice);
47         switch(choice)
48         {
49             case 1 : printf("Enter item to be inserted\n");
50                     scanf("%d",&item);
51                     insertrear();
52                     break;
53             case 2 : item=deletefront();
54                     if(item==-1)
55                     {
56                         printf("Queue is empty\n");
57                     }
58                     else
59                     {
60                         printf("Item deleted=%d\n",item);
61                     }
62                     break;
63             case 3 : display();
64                     break;
65             default : exit(0);
66         }
67     }
68 }
69

```

```
1:Insertion
2:Deletion
3:Display
4:Exit
```

Enter your choice

2

Queue is empty

```
1:Insertion
2:Deletion
3:Display
4:Exit
```

Enter your choice

3

Queue is Empty

```
1:Insertion
2:Deletion
3:Display
4:Exit
```

Enter your choice

1

Enter item to be inserted

12

```
1:Insertion
2:Deletion
3:Display
4:Exit
```

Enter your choice

1

Enter item to be inserted

13

```
1:Insertion
2:Deletion
3:Display
4:Exit
```

Enter your choice

1

Enter item to be inserted

14

```
1:Insertion
2:Deletion
3:Display
4:Exit
Enter your choice
1
Enter item to be inserted
15
Queue Overflow
```

```
1:Insertion
2:Deletion
3:Display
4:Exit
Enter your choice
3
contents of queue
12
13
14
```

```
1:Insertion
2:Deletion
3:Display
4:Exit
Enter your choice
2
Item deleted=12
```

```
1:Insertion
2:Deletion
3:Display
4:Exit
Enter your choice
4
```

```
Process returned 0 (0x0)   execution time : 48.751 s
Press any key to continue.
```