

```

#include <stdio.h>
#include <conio.h>
#include <process.h>
#define QWE_SIZE 3
int item, front = 0, rear = -1, q[10];
void enqueue () {
    if (rear == QWE_SIZE - 1) {
        printf("queue overflow\n");
        return;
    }
    rear += 1;
    q[rear] = item;
}

int deletefront () {
    if (front > rear) {
        front = 0;
        rear = -1;
        return -1;
    }
    return q[front]++; q[front++];
}

void display () {
    int i;
    if (front > rear)
        printf(":::d\n", q[i]);
}

void main () {
    int choice;
    clrscr();
}

```

for (;;) {

printf ("1: insert rear 2: delete front 3: display
4: exit \n");

printf ("enter choice \n");

scanf ("%d", &choice)

switch (choice) {

case 1: printf ("enter item to be inserted \n");

scanf ("%d", &item)

insertrear();

break;

case 2: item = deletefront();

if (item == -1)

printf ("queue is empty \n");

else

printf ("item deleted = %d \n", item);

break;

case 3: display();

break

case 4: exit();

}

2

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1  #include <stdio.h>
2  #include <conio.h>
3  #include <process.h>
4  #define QUE_SIZE 3
5  int item,front=0,rear=-1,q[10];
6  void insertrear() {
7      if(rear==QUE_SIZE-1) {
8          printf("Queue overflow\n");
9          return;
10     }
11     rear+=1;
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 display() {
23     int i=0;
24     if(front>rear)
25
26     printf("%d\n",q[i]);
27 }
28 int main() {
29     int choice;
30     for(;;) {
31         printf("1:insert rear\n2:delete front\n3:display\n4:exit\n");
32         scanf("%d",&choice);
33         switch(choice) {
34             case 1:printf("Enter item\n");
35                     scanf("%d",&item);
36                     insertrear();
37                     break;

```

```

14 int deletefront() {
15     if(front>rear) {
16         front=0;
17         rear=-1;
18         return -1;
19     }
20     return q[front++];
21 }
22 void display() {
23     int i=0;
24     if(front>rear)
25
26     printf("%d\n",q[i]);
27 }
28 int main() {
29     int choice;
30     for(;;) {
31         printf("1:insert rear\n2:delete front\n3:display\n4:exit\n");
32         scanf("%d",&choice);
33         switch(choice) {
34             case 1:printf("Enter item\n");
35                 scanf("%d",&item);
36                 insertrear();
37                 break;
38             case 2:item=deletefront();
39                 if(item==-1)
40                     printf("Queue is empty\n");
41                 else
42                     printf("item deleted=%d",item);
43                 break;
44             case 3:display();
45                 break;
46             case 4:return 0;
47         }
48     }
49 }

```

```
1:insert rear
2:delete front
3:display
4:exit
1
Enter item
1
1:insert rear
2:delete front
3:display
4:exit
1
Enter item
2
1:insert rear
2:delete front
3:display
4:exit
1
Enter item
3
1:insert rear
2:delete front
3:display
4:exit
1
Enter item
4
Queue overflow
1:insert rear
2:delete front
3:display
4:exit
3
1:insert rear
2:delete front
3:display
4:exit
2
item deleted=11:insert rear
2:delete front
3:display
4:exit
2
item deleted=21:insert rear
2:delete front
3:display
4:exit
2
item deleted=31:insert rear
2:delete front
3:display
4:exit
2
Queue is empty
```