

Program

```
#include <stdio.h>
#include <conio.h>
#include <process.h>
#define QUEUE_SIZE 3
int item, front = 0, rear = -1, q[10];
void insertrear()
{
    if (rear == QUEUE_SIZE - 1)
    {
        printf ("Queue Overflow \n");
        return;
    }
    rear = rear + 1;
    q[rear] = item;
}
int deletefront()
{
    if (front > rear)
    {
        front = 0;
    }
}
```

```

    rear = -1;
    return = -1;
}
return q[front++];
}
void display(Q)
{
    int i;
    if (front > rear)
    {
        printf("Queue is empty\n");
        return;
    }
    printf("Contents of queue\n");
    for (i = front; i <= rear; i++)
    {
        printf("%d\n", q[i]);
    }
}

void main()
{
    int choice;
    clrscr();
    for(;;)
    {
        printf("\n1. Insert rear\n2. Delete front\n3. display\n4. exit\n");
        printf("Enter your 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("Q is empty\n");  
else  
printf("Item deleted = %d\n", item);  
break;

case 3: displayQ();  
break;

default:

}

};