```
Program of linear
                                    queve
#include < Std:o.h >
#include < conio.h>
# include < processin>
# Define QUE_SIZE 3
int item, front = 0, rear = -1, q[io];
void insertrear ()
d if (rear = = QUE_SIZE-1)
a printy ("queue oveflowin");
reforn;
rear = rear + 11; 11 kins part
 alter, ( ) sight site of the
Int deletefrant ()
dif (front > rear)
d front = 0;
 return -1:
 return q (Gront +1);
 void displaya ()
 if (front > rear)
  prints (" queve is empty In");
```

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```
printy (" contents of queve | n");
  for (i= front; i = rear; i++)
· < printf (" .1.d In", v(i));
   void main ()
 ( int choice ();
    drier();
     for (;;)
  print ("In1: insert rear In2: delete front In3: display
                            Inu: cxit In");
     prints (" Enter the choice (n");
     Scanf (" . 1 . d", Pchoice);
    Switch (choice)
  of case 1: printy ("Enter the item to be inserted in
               Sconf (" 1-d to", fitem);
               insertrear ();
               break;
    case 1; item = delete front ();
               if (item = = -1)
               printy (" queve is empty In");
              else
               prints ("item deted = 1.2 ln", item);
              break;
    case 3: displayer display Q(); break;
     default: exit (0);
```

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```
int item, front 0, rear -1, q[10]; void insertrear()
           If (rear QUE_SIZE-1)
                  print(("Queue overflow\n");
return;
          }
rear=rear=1;
q[rear]=item;
 int deletefront(){
    if(front rear)
    f
                  rears-1;
return -1;
          } return q[front--];
  void displayQ()
{
         int i;
if(front)rear){
   print("Queue is empty");
   return;
          prints("contents of queue\n");
for(i=front;i<=rear;i+){
   prints("Md\n",q[i]);</pre>
yoid main()
         int choice;
                 (;;){
print ("In 1:insert rear\n 2: delete front\n 3:display\n 4:exit\n");
print ("Enter the choice\n");
sum ("Md", Schoice);
switch(choice);
case 1: print ("Enter the item to be inserted\n");
scar ("Md", Sitem);
insertrear();
                        insertion.
ireak;
case 2:item=deletefront();
if(item=-1)
    print(("queue is empty\n");
    else
    print(("item deleted=%d\n",item);
  break;

trane 1:displayQ();

break;

defaultreat(0);

}
```

2: delete front 3:display 4:exit Enter the choice mput Enter the item to be inserted 4 1:insert rear 2: delete front 3:display 4:exit Enter the choice Enter the item to be inserted 1:insert rear 2: delete front 3:display 4:exit Enter the choice Enter the item to be inserted 1:insert rear 2: delete front 3:display 4:exit Enter the choice 3 contents of queue 3

```
l:insert rear
2: delete front
3:display
4:exit
Enter the choice
1
1:insert rear
2: delete front
3:display
4:exit
Enter the choice
1
Enter the item to be inserted
4
1:insert rear
2: delete front
3:display
4:exit
Enter the choice
1
Enter the them to be inserted
2
Oueue overflow
```

1:insert rear 2: delete front 3:display 4:exit Enter the choice Enter the item to be inserted 1:insert rear 2: delete front 3:display 4:exit Enter the choice item deleted=5 1:insert rear 2: delete front 3:display 4:exit Enter the choice queue is empty 1:insert rear 2: delete front 3:display 4:exit Enter the choice

input