//LINEAR QUEUE

```
Queue program
#include Estatio. h7
# include < Comio. h?
# include (process.h)

# alexine ONE-Size 3

Int Hem, front =0, year = -1, gC10];
 void us sextreas O
      point (ee queue overflow in?);
  year = rear + 1;
 void display al)
    if C front 7 rear)
            print f (ce onene is empty In?);
           return 9
```

```
prosent f (ce Contents of Queue In?);

for (i=front; i (= rear; i+1)

print f (ce of d In?, q [i]);
void marin ()
      just choice;
      Claser ();
      forci;
        print f (ec |n 1: insert rear |n 2. delete front |n 3: dipl
        printf (" Enter the choice In");
        Scanf cc. /d" fchoice);
        Switch (choice)
         Case I: printf (ec enter the item to be inserted !
                Canfled d', & item)
                 linscatrear ();
               breaks
         Case Q: item = delete front ();
                   y (tem = = -18
                     Print f (« Queue is empty ?)
                     printf (ee item deleted = % d 1 n ; iten);
                     Case 2: displayal)
                     default: exit(0);
```

// CIRCULAR QUEUE

```
Proglam:
#include (Stolio.h) # include (Conio.h)
 # define Que size 3
 unt item , front og rea = -1, g Cauc-size I g Count = 0;
 void insertisear ()
 if (court == Que_sire)
  print f Cec Queue overflow (n");
  rear = (rear + 1).1. Que_sire;
  q [rear]=item;
  Count ++ ;
unt delete feont ()
    if (count == 0) return - 1;
    item = q [front];
front = Grant +D-1- Que-size;
Count = Count -1;
   return item;
void display ac)
```

```
unt infi
if Count == 0)
   print f ( ce buche is empty \n ");
   relien;
f= front;
printf ( Ec Contents of Quare In ");
for (i=1; i(= Count; ) i++)
    Printf ("e. Ld In" , g(f));
       f = (f+1) 1. QUE- Size;
void main ()
    unt Chroice;
      Chroca ();
      for (;;)
                                               display
         printf (ee In 1. insert rear In 2. delete front In?
           144. ext 109);
         prints (ceenter the Choice In");
         Sang (e./.d? , & Choice);
        Switch (Choice)
             Case 1 : proint f lee Enter the item to be
                   Scanf (°e-1.d1?, giten);
                    ungertream ();
                   Urealej
             Case 2: item = deletekon+();
                      if (item = = -1)
                       print j ( e Queue is emptyling)
                        else
```

