SURYA Gold
Date Page

CIRCULAR QUEUE.

```
#include <stdio.h>
#include <conio.h>.
#include <stdlib.h>.
#define QUE_SIZE 3
int item, front=0, rear=-1, q[QUE_SIZE], count=0,
void insertrear()
 {
   if (count == QUE_SIZE)
    {
      pf (" Queue overflow\n");
      return;
    }
  rear = (rear +1) % QUE_SIZE;
   q[rear]= item;
    count ++;
  }
int deletefront()
  {
   if (count == 0)
       return -1;
  item = q[front];
   front = (front +1) % QUE_SIZE;
    count = count -1;
     return item;
  v  }
    void display()
     {
      int i, f;
     if (count ==0)
      {
      pf (" Queue is empty\n");
```

```
return;
}
f = front;
pf("contents of queue\n");
    for(i=1; i<=count; i++)
    {
    pf("%d\n", q[f]);
    f = (f+1) % QUE_SIZE;
    }
}
void main()
  {
    int choice;
   for(;;)
  {
pf("1: insert rear 2: deletefront 3: display 4: exit");
 pf("Enter the choice");
  sf("%d", &choice);
 switch(choice).
 {
 case 1: printf("enter the item to be inserted\n");
 sf("%d", &item);
    insertrear();
     break;
 case 2: item = deletfront();
      if (item == -1);
    pf("queue is empty\n");
      else
    pf("item deleted = %d\n", item);
      break.
    case 3: displayQ();
          break;
   default: exit(0);
   }
}
```