Circular queue

```
#include<stdio.h>
#include<process.h>
#include<conio.h>
#define QUE_SIZE 5
int item, front=0, rear=-1, q[5], count=0;
void insert()
{   if(count==QUE_SIZE)
    {   printf("queue overflow\n");
        return;
    }
    rear=(rear+1)%QUE_SIZE;
    q[rear]=item;
    count++;
}
int delete()
{   if(count==0)
    {   printf("queue is empty");
        return(-1);
    }   item=q[front];
    front=(front+1)%QUE_SIZE;
    count--;
    return(item);
}
void display()
{   if(count==0)
    {   printf("queue is empty\n");
        return;
    }
    int f=front
    for(int i=1; i<=count; i++)
    {   printf("%d\n", q[f]);
        f=(f+1)%QUE_SIZE;
    }
}
```

```
void main()
{
    int n;
    for(;;)
    {
        printf("1. insert \n 2. Delete. \n 3 display
            \n 4. exit \n");
        scanf("%d", &n);
        switch(n)
        {
            case 1: printf("Enter item \n");
                    scanf("%d", &item);
                    insert();
                    break;
            case 2: item = delete();
                    if(item == -1);
                        printf("queue is empty \n");
                    else
                        printf("deleted item = %d",
                                item);
                    break;
            case 3: display();
                    break;
            default: exit(0);
        }
    }
}
```