LAB 4

```
#include <stdio.h>
#include <conio.h>
#include <process.h>
#define QUE_SIZE 3
int item, front=0, rear=-1, q[QUE_SIZE], count=0;
void insertrear(){
    if(count==QUE_SIZE){
    printf("QUEUE OVERFLOW");
    return;}
    rear=(rear+1)%QUE_SIZE;
    q[rear]=item;
    count++;
}
void deletefront(){
        if(count==0) return -1;
        item=q[front];
        front=(front+1)%QUE_SIZE;
        count--;
        return item;
}
void display(){
        if(count==0){
        printf("QUEUE is empty");
        return;
        }
        printf("contents of QUEUE are: \n");
        for(int i=1; i<=count; i++){
        printf("%d \n", q[front]);
        front=(front+1)%QUE_SIZE;
        }
}
void main(){
    int choice;
    for(;;){
    printf("\n1: Insertrear \n2: Delete \n3: Display
            \n4: exit \n");
    printf("Enter ur choice\n");
    Scanf("%d", &choice\n");
```

```
Switch (choice) {
    case 1 : printf ("Enter item to be inserted");
             scanf ("%d", &item);
             insertrear ();
    break;
    case 2 : item = deletefront ();
             if (item == -1) {
               printf ("Queue is empty");
             else
               printf ("Item Deleted = %d \n", item
    break;
    case 3 : display ();
    break;
      default : exit (0);
    }
  }
}
```