Lab program 3

```
#include<stdio.h>

#define SIZE 3
int item, front=0, rear=-1, q[10];
void insertrear(){
    if(rear==SIZE-1){
    printf("queue overflow");
    return;
    }
    rear+=1;
    q[rear]=item;
}

int deletefront(){
    if(front>rear){
        front=0;
        rear=-1;
        return -1;
    }
    return q[front++]
```

```
void displayQueue(){
    int i;
  if(front>rear){
    printf("queue is empty\n");
    return;
  }
  printf("contents of queue\n");
  for(i=front; i<=rear; i++){
    printf("%d", q[i]);
 }
}
void main(){
    int choice, flag;
  while(flag=0){
   printf("\n 1. Insert Rear \n 2. Delete front \n 3.
          Display\n 4. Exit");
  printf("Enter choice:");
  Sconf("%d" &choice);
```

PTO

```
switch (choice){
    case '1':{
            printf ("Item to be inserted:");
            scanf ("%d",&item);
            insertRear();
          } break;
    case 2:{ item=deleteFront();
             if (item==-1)
             printf ("queue is empty\n")
            else
              printf ("item deleted = %d\n",item);
          } break;
    case 3:{ displayQueue();
             break;
          }
    default: exit(0);
  }
}
```