***QUEUE***

#include <stdio.h>

#include <stdbool.h>

#define LEN 6

int arr[LEN];

int front = 0;

int back = -1;

int c = 0;

bool isEmpty() {

return c == 0;

}

//to check whether the array is full or empty

bool isFull() {

return c == LEN;

}

void insert(int x) {

if(!isFull()) { //if the array is not full then insert at the last

if(back == LEN-1) { // if the space is over at the right of the array then the counter back is resetted to -1 so tht the value can be inserted at the beginning

back = -1;

}

arr[++back] = x; // back is incremented and then the value is inserted in the array

c++;

}

}

int removeX() {

int x = arr[front++]; // value is removed and then the front is decreased

if(front == LEN) { // if the value of front becomes equal to the length,the couter is resetted to 0

front = 0;

}

c--;

return x;

}

**c is used to check whether the array is full or not**