

# Queue of circular LL

10 March 2024 15:43

```
#include<stdio.h>
#include<stdlib.h>

struct node{
    int data;
    struct node *next;
}*front=NULL,*rear=NULL,*n;

void enqueue(int num){
    n=(struct node*)malloc(sizeof(struct node));
    n->data=num;
    n->next=NULL;
    if(rear==NULL){
        rear=n;
        front=n;
    }
    else{
        rear->next=n;
        n->next=front;
        rear=n;
    }
}

void dequeue(){
    if(front == NULL) {
        printf("Queue is empty\n");
        return;
    }
    struct node *t = front;
    front = t->next;
    free(t);
}

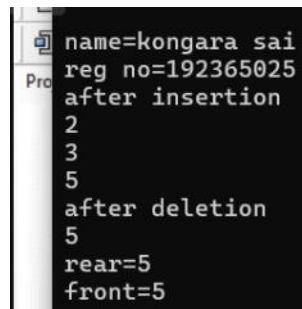
void rear1(){
    if(rear == NULL)
        printf("Queue is empty\n");
    else
        printf("rear=%d\n",rear->data);
}

void front1(){
    if(front == NULL)
        printf("Queue is empty\n");
    else
        printf("front=%d\n",front->data);
}

void display1() {
    struct node *t = front;
    if (rear == NULL) {
        printf("Queue is empty\n");
        return;
    }
    do {
        printf("%d\n", t->data);
        if(t == rear) {
            break;
        }
        t = t->next;
    } while (t != front);
}

int main(){
    printf("name=kongara sai\nreg no=192365025\n");
    enqueue(2);
    enqueue(3);
    enqueue(5);
    printf("after insertion\n");
    display1();
}
```

```
dequeue();  
dequeue();  
printf("after deletion\n");  
display1();  
rear1();  
front1();  
return 0;  
}
```



The screenshot shows a terminal window with a black background and white text. The output of the program is as follows:

```
name=kongara sai  
reg no=192365025  
after insertion  
2  
3  
5  
after deletion  
5  
rear=5  
front=5  
-----
```