

```
#include <stdio.h>
#define size 3
int item, f=0, r=-1, q[size], count=0;
void insertQueue()
{
    if (count == size)
    {
        printf("Overflow!\n");
        return;
    }
    r = (r+1) % size;
    q[r] = item;
    count++;
}
```

```
int deleteQueue()
{
    if (count == 0) return -1;
    item = q[f];
    f = (f+1) % size;
    count = count - 1;
    return item;
}
```

```
void display()
{
    int i, t;
    if (count == 0)
    {
        printf("Queue is empty") return;
    }
    int front = f;
    printf("Contents : \n");
    for (int i=1; i<=count; i++)
    {
        printf("%d\n", q[front]);
        front = (front+1) % size;
    }
}
```

```

void main()
{
    int choice, check = -1;
    while (check == 1)
    {
        printf("1) Insert\n 2) Delete\n 3) Display\n 4) Exit\n Enter choice : \n");
        scanf("%d", &choice);
        switch(choice)
        {
            case 1: printf("Enter item:\n");
                     scanf("%d", &item);
                     insertrear();
                     break;

            case 2: item = deletefront();
                     if (item == -1)
                         printf("Queue is EMPTY\n");
                     else
                         printf("Deleted item: %d\n", item);
                     break;

            case 3: display(); break;

            default: check = 0;
        }
    }
}

```