Program 4 (Circular Queue)

```
void ~~enque~~ push(int data) {

    if ((front == 0 && rear == Max-1) ||
                    front == Mear+1) {
        printf("Queue overflow \n");
    }
    else {
        rear = (rear+1) % MAX;
        queue[rear] = data;
        if (front == -1) {
            front = 0;
        }
    }
}
int pop() { int item;
    if (front == -1 && rear == -1) {
        return -999;
    }
    else {
        item = queue[front];
        if (front == rear) {
            front = -1
            rear = -1
        }
        else
            front = (front+1) % MAX;
        return item;
}
```

```
void display() {
    if (front == -1 && rear == -1)
        || (front == rear) {
        printf("Queue is empty");
    }
    else {
        printf("Contents of the queue : \n");
        for (int i = front; i <= rear; i++) {
            printf("%d ", queue[i]);
        }
        printf("\n");
    }
}
```