INSERT INTO CIRCULAR QUEUE

Insert Circular ():
Description: Here QUEUE is an array with N locations. FRONT and REAR points to the front and rear elements of the QUEUE. ITEM is the value to be inserted.

1. If (FRONT == 1 and REAR == N) or (FRONT == REAR + 1) Then
2. Print: Overflow
3. Else
4. If (REAR == 0) Then [Check if QUEUE is empty]
   (a) Set FRONT = 1
   (b) Set REAR = 1
5. Else If (REAR == N) Then [If REAR reaches end if QUEUE]
6.   Set REAR = 1
7. Else
8.   Set REAR = REAR + 1 [Increment REAR by 1]
   [End of Step 4 If]
9. Set QUEUE[REAR] = ITEM
10. Print: ITEM inserted
   [End of Step 1 If]
11. Exit