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.

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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
```