INSERT

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

```
1.   If (REAR == N) Then                          [Check for overflow]

2.        Print: Overflow

3.   Else

4.        If (FRONT and REAR == 0) Then           [Check if QUEUE is empty]

          (a)  Set FRONT = 1

          (b)  Set REAR = 1

5.        Else

6.             Set REAR = REAR + 1                [Increment REAR by 1]

          [End of Step 4 If]

7.        QUEUE[REAR] = ITEM

8.        Print: ITEM inserted

     [End of Step 1 If]

9.   Exit
```