

Algorithm: Enqueue (2/2)

Step 1: if $\text{REAR} = \text{N}-1$ then [Check Overflow]
 PRINT "QUEUE is Full or Overflow"
 Exit

Step 2: if $\text{FRONT} = \text{NULL}$ [Check if empty Queue]
 $\text{FRONT} = -1$
 $\text{REAR} = -1$

Step 3: $\text{REAR} = \text{REAR} + 1$ //[Increment REAR]
 $\text{QUEUE}[\text{REAR}] = \text{ITEM}$
 //[Copy ITEM to REAR]

Step 4: Return

front, rear
[0]

A

enqueue (B)

front rear
[0] [1]

A

B

enqueue (C)

front rear
[0] [1] [2]

A

B

C