

LAB-5

ENQUEUE: FRONT = REAR = -1,
QUEUE, ELE, MAX.

1) IF FRONT = 0 AND REAR = MAX - 1 OR
FRONT = REAR + 1.

2) PRINT "Queue Overflow"

3) ELSE

4) REAR = (REAR + 1) % MAX.
QUEUE[REAR] = ELE.

5) IF FRONT = -1
FRONT = 0

6) END OF IF

7) END OF IF

8) END

DEQUEUE: FRONT, REAR, QUEUE,
MAX,

1) IF FRONT = -1 AND REAR = -1
PRINT "QUEUE UNDERFLOW"

3) ELSE

4) IF FRONT = REAR

5) FRONT = -1.

6) REAR = -1.

7) ~~ELSE~~ ELSE

8) FRONT = (FRONT + 1) % MAX.

9) END OF IF.

10) END OF IF.

11) END.

DISPLAY: FRONT, REAR, QUEUE,
I, MAX.

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1) IF FRONT=-1 AND REAR=-1
2)   PRINT "EMPTY QUEUE"
3) ELSE
4)   I = FRONT
5)   DO
6)     PRINT QUEUE[I]
7)     IF I = REAR
8)       BREAK.
9)     END OF IF.
10)    I = (I+1) % MAX.
11)  WHILE I != FRONT.
12)  END OF IF.
13)  END.
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