On my honor, I pledge that I have neither recieved nor provided improper assistance in the completion of this assignment. -2190012 강성민

Queue Variations: Circular Queue

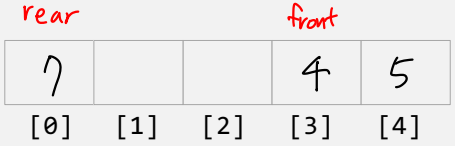
```
int main() {
    queue q = newQueue();
    dequeue(q);
    enqueue(q, 1);
    enqueue(q, 2);
    enqueue(q, 3);
    enqueue(q, 4);
    enqueue(q, 5);
    enqueue(q, 6);
    display(q);
    int elem = dequeue(q);
    if (elem != -1)
       cout << "dequeued: " << elem << endl;
    display(q);
    enqueue(q, 7);
    display(q);
    enqueue(q, 8);
    dequeue(q);
    dequeue(q);
    display(q);
    return 0;
}
```

first error: cannot dequeue from empty queue

second error: cannot enqueue to full queue

third error : cannot enqueue to full queue

front
rear



Quiz:

- How many failures occurred? 3 errors
- At the end of running this main(),
  (1) draw a diagram that shows the status of queue items as well as the locations of front and rear.
  (2) write elements in the queue from front to rear.