

You can find multiple choice review questions (when they are available) in D2L under:
Assessments->Quizzes

For all questions, unless otherwise specified assume that there are no syntax errors in any programs or program fragments.

Short answer (code tracing):

JT's hint: Before looking at the answer make a real attempt at providing an answer. If you are drawing a blank then it indicates that you need to study the material from lecture as well as looking at the in class notes that you should be taking as you are following along in class. You will get far more out of the process if you try it out as if you were writing an actual exam question rather than just directly looking at the answer.

(Solution is on the next page)

**#Solution: Determines if queue has elements occupied with a non-empty
#element**

```
def isOccupied(aQueue):
    occupied = False
    i = 0
    size = len(aQueue)
    while(i < size):
        if(aQueue[i] != EMPTY):
            occupied = True
        i = i + 1
    return(occupied)
```

**#Solution: removes elements from queue according to the priority FIFO
#implementation. Note: this is a simple implementation that would be
#acceptable for an exam. More efficient approaches could: 1) track the
#index of the last occupied element and start scanning at that
#location 2) shift elements left, that way the left side of the queue
#is the part that is occupied, the right is where there's empty
elements**

```
def remove(aQueue):
    i = 0
    size = len(aQueue)
    done = False
    while(done == False):
        print(i, end = "-")
        if(aQueue[i] == PRIORITY):
            aQueue[i] = EMPTY
            done = True
        elif(aQueue[i] == REGULAR):
            aQueue[i] = EMPTY
            done = True
        i = i + 1
    if (i >= size):
        done = True
```