

ICS202 QUIZ#2 (Term 071)
Duration: 20 minutes

ID#: _____ NAME: _____

Q 1 Suppose **stack** is an object of **Stack** type and **queue** is an object of **Queue** type. Both are empty.

a. Show the contents of the **stack** after each line of the following code is executed: [5]

<code>stack.push(new Integer(5));</code>	stack =
<code>stack.push(new Integer(17));</code>	stack =
<code>stack.push(new Integer(91));</code>	stack =
<code>Object a = stack.pop();</code>	stack =
<code>stack.push(new Integer(13));</code>	stack =
<code>stack.push(stack.pop());</code>	stack =

b. Show the contents of the **queue** after each line of the following code is executed: [5]

<code>queue.enqueue(new Integer(41));</code>	queue =
<code>queue.enqueue (new Integer (13));</code>	queue =
<code>queue.enqueue (new Integer (28));</code>	queue =
<code>Object b = queue.dequeue ();</code>	queue =
<code>queue.enqueue(new Integer (13));</code>	queue =
<code>queue.enqueue(queue.dequeue());</code>	queue =

Q 2 Write a method having the following signature in **MyLinkedList** class. The method updates the **head** and **tail** references of the linked list and the **next** reference of related elements properly so that the first element is moved to the end of the list. i.e., the first element becomes the last element and second element becomes the first. If the list has fewer than two elements, then it prints a message “List is too short” and returns without updating the list.

Note: You are not allowed to call any method of **MyLinkedList** class or use a loop in the method. [10]

```
public void rotate()
```