

List ADT Quiz

ANSWER KEY

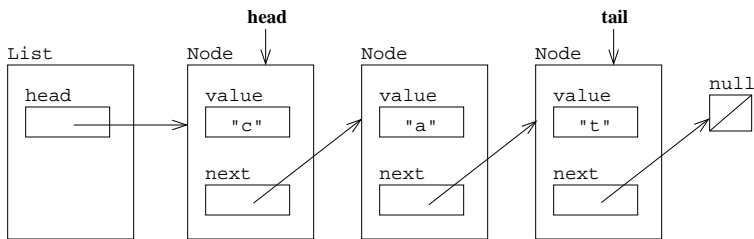
The following two class definitions are enough to build a simple linked list implementation that holds character values.

```

public class List {
    public Node head;
    public List() {}
}

public class Node {
    public char value;
    public Node next;
    public Node(char value) {
        this.value = value;
    }
}
    
```

- Using these classes as a basis, draw a picture of memory for a linked list that contains three nodes with the values "c", "a", and "t" (in that order). Identify the head and tail of the list.



- Assume you have the variable aNode of type Node which references the node object containing value 'a' in the previous question. Write the Java statements necessary to insert a new Node with the value 'r' after aNode. Draw the resulting list.

```

Node newNode = new Node('r');
newNode.next = aNode.next;
aNode.next = newNode;
    
```

