

Quiz 1

(solutions)

1. Given the following code fragment

```
Object[] A = {new Integer(3), new String("15-121"), new ArrayList()};  
Object[] B = new Object[3];  
System.arraycopy(A, 0, B, 0, A.length);
```

What are the results of the following comparisons (circle either T or F)?

- a) **F** A == B;
- b) **F** A.equals(B);
- c) **T** Arrays.equals(A, B);

2. Consider the following class

```
public class Demo  
{  
    public static void main(String[] args)  
    {  
        int[] a = {1, 2, 3, 4, 5};  
        changeIt(a);  
        System.out.println(Arrays.toString(a));  
    }  
    public static void changeIt(int[] list)  
    {  
        list[0] = list[list.length - 1];  
    }  
}
```

What will the above code segment print?

- a) [0, 2, 3, 4, 5]
- b) [1, 2, 3, 4, 5]
- c) **[5, 2, 3, 4, 5]**
- d) none of the above

3. Implement a method that inserts an element to the array at index 0. The method shifts the element currently at that position and any subsequent elements to the right.

```
public static int[] insertAtFront(int[] list, int toInsert)
{
    int[] x = new int[list.length + 1];
    System.arraycopy(list, 0, x, 1, list.length);
    x[0] = toInsert;
    return x;
}
```