1. Consider the following methods:

```java
class ArrayMethods { 
    public static void method1(int[] array) { 
        array = new int[5]; 
        array[0] = 4; 
        array[array.length-1] = 10; 
    }

class ArrayMethods { 
    public static void method2(int[] array) { 
        array[0] = array[array.length-1]; 
        array[array.length-1] = array[0]; 
    }

class ArrayMethods { 
    public static void method3(int[] array) { 
        int t = array[0]; 
        array[0] = array[array.length-1]; 
        array[array.length-1] = t; 
    }
}
```

You are given the following array declaration:

```java
int[] a = {9, 2, 4, -3, 0};
```

Draw the array `a` after each of the following method calls executes. Assume the questions are independent and begin with the original array `a` above.

(a) (2 points) `method1(a)`

Solution: `{9, 2, 4, -3, 0}`

(b) (2 points) `method2(a)`

Solution: `{0, 2, 4, -3, 0}`

(c) (2 points) `method3(a)`

Solution: `{0, 2, 4, -3, 9}`
2. Select the best answer for each of the following questions.

(a) (1 point) What is the value of `args[0]` if a program is invoked with the command line:

```
java Program 10 h 12.6 hello true
```

A. java  
B. Program  
C. 10  
D. A  
E. 11  

(b) (1 point) What type is `args[2]` if a program is invoked with the command line:

```
java Program 10 h 12.6 hello true
```

A. int  
B. char  
C. double  
D. String  
E. boolean  

(c) (1 point) Accessing which of the following would cause a runtime error if a program was invoked with the command line:

```
java Program 10 h 12.6 hello
```

A. args[0]  
B. args[1]  
C. args[2]  
D. args[3]  
E. args[4]  

3. Consider the following array, and then answer the following questions. Assume each question begins with the same initial array given below.

```
-64 -126 0 25 -6 14 1
```

(a) (3 points) Draw the array after one element has been sorted using the bubble sort algorithm.

Solution: 

```
-126 -64 0 -6 14 1 25
```

(b) (3 points) Draw the array after one element has been sorted using the selection sort algorithm.

Solution: 

```
-126 -64 0 25 -6 14 1
```