

Exercises: Primitive Variables

Code Reading

1. Consider the following variable identifiers. Mark whether the identifier is valid or invalid. If it is invalid, state why.

_____	xCoordinate
_____	2ndName
_____	FINAL_AMOUNT
_____	x
_____	my string
_____	class

2. Consider the following lines of code. At the end of the code, which variables have been declared, and which have been initialized?

```
public class Exercise {  
  
    public static void main(String[] args) {  
  
        String firstName, lastName;  
        String hometown = "La Crosse", state;  
  
        firstName = "James";  
  
    }  
  
}
```

3. Consider the following lines of code. At each line, state the current values of all the initialized variables.

```
public class Exercise {  
  
    public static void main(String[] args) {  
  
        String firstName, lastName;  
        String hometown = "La Crosse", state;  
  
        firstName = "James";  
        lastName = "Smith";  
        state = firstName;  
        lastName = state + lastName;  
        hometown = lastName;  
  
    }  
}
```

Code Writing

4. For the following parts, (a) declare a `String` variable called `state`, and (b) initialize the variable to `"Wisconsin"`. On (c), declare and initialize the variable all on one line.

(a)

(b)

(c)

5. For the following parts, (a) declare a `Scanner` variable called `scan`, and (b) instantiate the variable to read from `System.in`. On (c), declare and instantiate the variable all on one line.

(a)

(b)

(c)

6. Below are two variables, `a` and `b`. Write code to assign the value of variable `a` to variable `b`. You should only use the variables provided in your solution, **not** any string literals (e.g., `"one"` or `"two"`).

```
String a = "one";  
String b = "two";
```

7. Below, write code to declare and instantiate a `Scanner` variable called `readIn` that reads from `System.in`. Print a prompt for the user to input their major, and then use the `nextLine()` method to read in their answer and store it in a `String` variable called `major`. Consider how you might ensure there is a space between the prompt and the user's response. Test your solution by typing it into Eclipse.