Electrical and Computer Engineering Dept

COE 212
Engineering Programming

Fall 2013
W. FAWAZ

Quiz III

Problem I (Multiple Choice Questions)

1) Consider the following piece of code:
```
for (int i = 0; i<2; i++) {
       switch(i) { case 0: System.out.print("v ");break;
                   case 1: System.out.print("w ");
                   case 2: System.out.print("x ");break;
                   case 3: System.out.print("y ");
                   case 4: System.out.print("z ");break;
                   default: System.out.print("d ");}}
```
   When the above code is executed, the output will be:
   - a. v w y
   - **b. v w x**
   - c. v w z
   - d. v w w

2) Which of the following cannot be used as a parameter for the switch statement?
   - a. `int j = 1;`
   - **b. `boolean k = true;`**
   - c. `byte b = (byte) 2;`
   - d. `char c = 'c';`

3) How many times will the body of the following loop be executed?
```
int x = 10;
while(x > 0) {
       System.out.println(x);
       x--;
}
```
   - a. 9 times
   - **b. 10 times**
   - c. 11 times
   - d. None of the above

4) The "break" statement does which of the following?
   - **a. Transfers control out of the current control structure such as `switch`**
   - b. Ends the program
   - c. Denotes the ending of a `switch` statement
   - d. Indicates the end of line when using `System.out.print`

5) If `x` is an `int` where `x = 0` initially, what will `x` be after the following loop terminates?

```
while(x < 100)
      x *= 2;
```

   a. This is an infinite loop
   b. 64
   c. 128
   d. none of the above

Problem II (True/False)

1. It is possible to create an infinite loop out of `while` and `do-while` loops but not out of `for` loops.
Answer: True   **False**

2. The statement `while(a <= b) {a++; b--;}` will do the same thing as the statement `while(!(b < a)) {b--; a++;}`
Answer: **True**   False

3. When an "`if`" statement has an "`else`" clause associated with it, the body of the "`if`" must be delineated with a pair of curly braces
Answer: True   **False**

4. The contents of two strings can be compared using either equality operator (`==`) or the `equals()` method of the `String` class.
Answer: True   **False**

5. The following `if` statement: `if(name.length() = 3)` can be used to check if the length of the `String` variable called `name` is 3 characters long.
Answer: True   **False**