

Quiz 5: More logic

Name: _____

CSCI 110 Section 1

Friday, August 26, 2016

- 1) Determine the result of evaluating each expression on the left: true, false, error, or don't know. [70 points]

`false || (false && true)`

`!(true || false) && true`

`32 > 23 && 23 <= 32`

`5 > 100 || 4 + 5 == 9`

`!(19 % 3 == 2)`

`((false || true) && !false)`

`String a = "a"; String b = "b";
(a + b).equals("ab") &&
a.equals("a")`

`String s = "bob";
"stan".equals(s) || "bob" == s`

`int a = 5; int b = 7;
b < 7 || a == b || a >= 5`

`!(2 % 1 == 0 && 6 < 7)`

`int b = 20; boolean c = false;
!(!(b <= 10 || !c) && b >= 20)`

`!(5 / 2 == 2 || 5 < 1 / 2)`

`int a = 12; int b = 1;
int c = 14; int d = 7;
((a / b >= 1 || b / c >= 1) &&
(c / d >= 1 || d / a >= 1))`

`(!true || !false) ==
!(true && false)`

- 2) Fill out the blanks to complete the following program. If the user likes just dogs or just cats, greet them with, "Hello fellow dog-lover" or "Hello fellow cat-lover" respectively. If the user does not like either, print "I guess you don't like dogs or cats", If the user likes both, print "Hello animal-lover!". Hint: all three are compound expressions [30 points]

```
import java.util.Scanner;
class AnimalAsker {
    public static void main(String[] args) {
        Scanner reader = new Scanner(System.in);
        System.out.print("Do you like dogs? (true/false) ");
        boolean likesDogs = reader.nextBoolean();
        System.out.print("Do you like cats? (true/false) ");
        boolean likesCats = reader.nextBoolean();

        if (_____) {
            System.out.println("Hello fellow dog lover!");
        }
        if (_____) {
            System.out.println("Hello fellow cat lover!");
        }
        if (_____) {
            System.out.println("Hello animal lover!");
        }
    }
}
```

- 3) Swap two Strings a and b using a third variable. [extra credit, 15 points]

- 4) Swap two integers a and b without using a third variable. [extra credit, 25 points]