

IST 256
In-Class Exercises
Week 5 – Monday, February 15, 2010

Exercise 1. If Statements

Consider the following partial program:

```
int state = 23;
String color;

if ( state < 20 ) {
    color = "red"
}
else {
    color = "blue"
}

if ( state > 40 ) {
    color = "purple"
}
```

(a) State what the value of the variable *color* is at the end of the first IF statement.

(b) Then state what the value of *color* is at the end of the second IF statement.

Exercise 2: Thinking about a For Loop

Recall the following partial program that sums numbers:

```
int sum = 0;
// for loop that sums the 7 integers
for (int index = 1; index <= 7; index++) {

    sum = sum + index;
    System.out.println("Index is: " + i + " Sum is: " + sum);
}
```

Without typing this program into NetBeans, in the following boxes, write the values of the variables as this program is executed:

Variable	Val1	Val2	Val3	Val4	Val5	Val6	Val7
index							
sum							

Now consider this similar partial program that appends one string to another

```
String message = "";

// for loop that appends text 7 times
for (int index = 1; index <= 7; index++) {

    message = message + "*";
    System.out.println("Index is: " + i + " String is: " + message);
}
```

Without typing this program into NetBeans, in the following boxes, write the values of the variables as this program is executed:

Variable	Val1	Val2	Val3	Val4	Val5	Val6	Val7
index							
message							