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Exercise on Lesson 9

Use the following code for problems 1 – 10 and give the value of *true_false* for each:

```
int i = 10, j = 3;
boolean true_false;
```

1. true_false = (j > i);

   false

2. true_false = (i > j);

   true

3. true_false = (i = = j);

   false

4. true_false = ((j <= i) | | (j >= i));

   true

5. true_false = ((i>j) && (j = = 0));

   false

6. true_false = ((j < 50) | | (j != 33));

   true

7. true_false = (!(j >= 0) | | (i <= 50));

   true

8. true_false = (!(!(!true)));

   false

9. true_false = (5 <= 5);

   true

10. true_false = (j != i);

    true

11. Write a statement that will store a true in *boolean b* if the value in the variable *m* is 44 or less.

    b = m <= 44;

12. Write a statement that will store a false in *boolean b* if the value in *r* is greater than 17.

    b = !(r > 17);

13. What is returned by the following expression? (Recall that the precedence order of logical operators is !, &&, and finally | |.)

    !((2>3) | | (5= =5) && (7>1) && (4<15) | | (35<=36) && (89!=34))

    false

In problem 14 – 16 what is the output?

14. String s1 = “school BUS”;
    if (s1.equals(“school bus”))
        System.out.println(“Equal”);
    else
        System.out.println(“Not equal”);

    Not equal

15. String s1 = “school BUS”;
    if (s1.equalsIgnoreCase(“school bus”))
    System.out.println(“Equal”);
    else
    System.out.println(“Not equal”);

    Equal

16. int j = 19, m = 200;
    if (j= =18)
        m++;
        j++;
    System.out.println(m);
    System.out.println(j);

    200
    20

17. Write a statement that will store a *false* in *boolean b* if the value in *g* is not equal to 34.

    b = !(g != 34);

18. Write a statement that will store a *true* in *boolean b* if integer *k* is even, *false* if it is odd.

    b = k % 2 = = 0;

19. Write a program that inputs a *String* from the keyboard after the prompt, "Enter your password". If it's entered exactly as "XRay", printout "Password entered successfully."; otherwise, have it printout "Incorrect password."

```
Scanner kbReader = new Scanner( System.in );
System.out.print( "Enter your password " );
String password = kbReader.next( );
if ( password.equals( "XRay" ) )
        System.out.println( "Password entered successfully." );
else
        System.out.println( "Incorrect password." );
```

20. What is output by the following "nested ifs" code?

```
int k = 79;
if (k>50)
{
        if (k<60)
        {System.out.println("One");}
        else
        {System.out.println("Two");}
}
else
{
        if (k>30)
                System.out.println("Three");
        else
                System.out.println("Four");
}
```

    Two