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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**

1. true\_false = (i > j);

**true**

1. true\_false = (i = = j);

**false**

1. true\_false = ( (j <= i) | | (j >= i) );

**true**

1. true\_false = ( (i>j) && (j = = 0) );

**false**

1. true\_false = ( (j < 50) | | (j != 33) );

**true**

1. true\_false = ( !(j >= 0) | | (i <= 50) );

**true**

1. true\_false = ( !( !(!true)) );

**false**

1. true\_false = (5 <= 5);

**true**

1. true\_false = (j != i);

**true**

1. 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;**

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

**b = !( r > 17 );**

1. 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?

1. String s1 = “school BUS”;

if ( s1.equals(“school bus”) )

System.out.println(“Equal”);

else

System.out.println(“Not equal”);

**Not equal**

1. String s1 = “school BUS”;

if ( s1.equalsIgnoreCase(“school bus”) )

System.out.println(“Equal”);

else

System.out.println(“Not equal”);

**Equal**

1. int j = 19, m = 200;

if (j= =18)

m++;

j++;

System.out.println(m);

System.out.println(j);

**200**

**20**

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

**b = !( g != 34 );**

1. 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;**

1. 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.” );**

1. 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**