WIX1002 Fundamentals of Programming Tutorial 3 Flow of Control (Selection)

1. Write statements for each of the following
   1. Determine whether 3x8=27.

if (3\*8 == 27)

System.out.print(“3\*8 = 27 is true”);

else

System.out.print(“3\*8 = 27 is false”);

* 1. Determine whether an input integer is an odd number or even number.

if (num / 2 == 0)

System.out.print(“It’s even number”);

else

System.out.print(“It’s is odd number”);

* 1. Determine whether a character is a capital letter.

char lett;

if (CharacterisUpperCase(lett))

System.out.print(“It’s in capital letter”);

else

System.out.print(“It’s not in capital letter”);

* 1. Display two strings in alphabetical order ignoring their case.

if (s1.compareToIgnoreCase(s2) > 0)

System.out.print( s2 + “,“ + s1);

else

System.out.print(s1 + “,” + s2);

* 1. A switch statement that display Sunday, Monday, .., Saturday if the input is 0, 1, …, 6.

1. Correct the error for the following statements. a.

if (num1 = num2)

System.out.println("Number 1 is equal to number 2.");

if (num1 == num2)

System.out.println(“Number 1 is equal to number 2.”);

b.

if (x > y > z)

System.out.println("x is the largest number");

if ( x > y && y > z)

System.out.println(“x is the largest number”);

c.

String s1, s2; if (s1==s2)

System.out.println("They are equal strings."); else (s1!=s2)

System.out.println("They are not equal strings.");

String s1, s2;

if (s1==s2)

System.out.println(“They are equal strings.”);

else

System.out.println(“They are not equal strings.”);

d.

if x>0 or y>0;

System.out.println("Either x or y is positive");

if (x > 0 II y > 0)

System.out.println(“Either x or y is positive”);

1. Write the output for the following statements when x=9 and y=10 a.

if (x < 10) if (y > 10)

System.out.println("\*\*\*\*\*"); else System.out.println("#####"); System.out.println("$$$$$");

#####

$$$$$

b.

if (x < 10) { if (y < 10)

System.out.println("\*\*\*\*\*"); else{ System.out.println("#####");

System.out.println("$$$$$");

}}

#####

$$$$$

c.

if (x < 10) { if (y < 10)

System.out.println("\*\*\*\*\*"); System.out.println("#####");

}

else { System.out.println("$$$$$");

}

#####

d.

if (x > 10) {

if (y > 10) { System.out.println("\*\*\*\*\*"); System.out.println("#####"); } else System.out.println("$$$$$");

}

No output

1. Write the java statements that used the if statement to find the biggest number among three given integers.

int num1, num2, num3;

if (num1 > num2 && num1 > num3)

System.out.print(num1 + “ is the biggest”);

else if (num2 > num1 && num2 > num3)

System.out.print(num2 + “ is the biggest”);

else

System.out.print(num3 + “ is the biggest”);

1. Write the java statements that determine whether the Leap year. A Leap year is divisible by 4 but not by 100. However, a Leap year is also divisible by 400.

int Lyear;

if ( (Lyear / 4 == 0) && !(Lyear / 100) ll (Lyear / 400) )

System.out.print(Lyear + “ is a Leap year.”);

else

System.out.print(Lyear + “ is not a Leap year.”);