In Class Activity #5

**Question 1:** Write a print statement to display on the console the following message:

“The file is in c:\Temp\theFile.txt”

**2)**

Try to predict the output of the following program on a piece of paper, and then run the code after in your IDE to confirm your response:

**public class** Question2{

**public static void** main (String[] args){

**final** String *SENTENCE* = "I hate programming.";

**int** position = *SENTENCE*.indexOf("hate");

String beforeHate = *SENTENCE*.substring(0, position);

String afterHate = *SENTENCE*.substring(position + 4);

String newString = beforeHate + "love" + afterHate;

System.*out*.println("The line of text to be changed is: ");

System.*out*.println(*SENTENCE*);

System.*out*.println("I have rephrased the line to read:");

System.*out*.println(newString);

}// end of main () }//end

**3)**

What is the Boolean value of the following expressions (true or false)?

a) (1+2 > 4-2 && 12 < 23)

b) (12 < 23 || 1+2 > 4-2)

c) (1+2 > 4-2 && 12 > 23)

d) (1+2 > 4-2 || 12 > 23)

**4)**

Assume the following declarations:

**public static void** main(String[] args) {

**int** x = 1;

**boolean** isFree = **false**;

**char** initial = 'L';

**char** code = 'Y';

String english = "hi";

String italian = "ciao";

**boolean** q = (5 == 6);

}

Using the above statements, for each of the following expressions below, if you were to print the statements, indicate if it creates a syntax error or not. If there is no error, indicate the value of the expression printed:

a) (**true** && (5>6))

b) ((x!=0) || (x%2 ==1))

c) (isFree | (x<0))

d) initial == code

e) !!q

f) (0 <= x <= 10)

g) (english > italian)

h) ((isFree) ? 4 : 10)

i) initial = code

j) ("italian".equals(italian))

Output Exercises:

**5)**

What is the output of the following snippets of code?

Output:

int i, j=1;

i = (j>1) ? 2:1;

switch(i) {

case 0: System.*out.println(0); break;*

case 1: System.*out.println(1);*

case 2: System.*out.println(2); break;*

case 3: System.*out.println(3); break;*

}

Output:

**6)**

What is the output of the following:

**public** **static** **void** main(String[] args) {

**for** (**int** i = 1; i <= 3; i++) {

**for** (**int** j = 1; j <= 2; j++) {

System.***out***.println(j);

}

}

}

Programming Exercises:

**7)**

Write a java program according to the following algorithm specification:

1) Display a message asking the user to enter a student id between 0 and 9999999.

2) Get the user input.

3) Verify the student id. If the user input is bigger than 9999999 or less than 0, then display an error

message, and exit the program.

4) Display the user input.

5) Display a message asking the user to enter a password with the length between 6 and 20.

6) Get the user input.

7) Verify the password. If the password length is not between 6 and 20, exit the program.

8) Display the user input.

9) Display a message asking the user to enter a string.

10) Display the user input.

11) Change the string to upper case.

12) Display the new string.

13) Exit the program.

**8)** Write an if-else statement to compute the amount of shipping due on an online sale. If the cost of the purchase is less than or equal to $20, the shipping cost is $5.99. If the cost of the purchase over $20 and at most $65, the shipping cost is $10.99. If the cost of the purchase is over $65, the shipping cost is $15.99.

**Submit on Omnivox before end of class to confirm your attendance. If you are not complete by end of class, upload what you have completed up until that point and complete the rest for homework. Submissions should be completed and submitted individually, do not upload submissions for multiple students, only your own.**