Please write your solution in this paper!!!

Java Summer 16 16 Test 1

Name: _____ Total: / 31

State whether following statements are True/False by writing **T (True) or False (F)** in the space provided right beside the question (13 marks)

1. A variable must be declared before it is used. ___

2. A variable name can contain spaces. __

3. A variable is a name for a value stored in memory. ___

4. The equal sign operator (=) is used to assign a new value to a variable. __

5. If a value could possibly have a decimal portion, int is the best data type choice. ___

6. Math.round(9.6) = 10 ___

7. Math.abs(-99) = -99 ___

Multiple Choice Questions

8. Comments are used to

   A. create assignment statements
   B. perform for loops
   C. identify, explain, and clarify program code
   D. make code faster

9. Math.pow(2,4)

   A. 2
   B. 4
   C. 16
   D. 18

10. Which of the following expressions could be used as the condition in an **if** statement?

   A. x== y
   B. x ++
   C. x += y
   D. x=y

11. An if statement that uses many if-else constructs to test the value of the same integer expression might be better written using a _____ statement.

A. for
B. switch
C. while
D. break

12. What effect does \n have when included in an output string?

A. output is moved to the next line
B. a \n is displayed in the output
C. a tab (8 spaces is displayed in the output
D. a n is displayed in the output

13. What output will display as a result of executing the program code shown below?

    int startingNumber = 10;
    int finalNumber = 25;

    startingNumber = finalNumber / 5;

    finalNumber = startingNumber + 5;

    System.out.println("finalNumber: " + finalNumber);

    A. finalNumber: 5
    B. finalNumber: 15
    C. finalNumber: 10
    D. finalNumber: 25

Short Answer Questions (4 marks)

14.   Consider the code shown below, and determine the following:

1. How many iterations (repetitions) of this loop will there be?

2. What will the value of j be in the final trace statement?

```
int j=10;

do

{

        System.out.println(j);

        j --;

} while (j > 10)
```

15.   What are the values of:

1. *numberOne*
2. *numberTwo*

immediately after the statements below are executed?

```
int numberOne =3;
int numberTwo =4;

if (numberOne > numberTwo)
{
        numberOne=5;
}
else
{
        numberTwo=5;
}

System.out.println("numberOne: " + numberOne + " numberTwo: " + numberTwo);
```

16. In the following 1 = true and 0 = false. Use 1 or 0 to complete the last column in each table. (4 marks)

A	B	A && B
1	1	
1	0	
0	1	
0	0	

A	B	A || B
1	1	
1	0	
0	1	
0	0	

17. A fast food restaurant charges $2.49 for burgers, $1.89 for fries, and $0.99 for soft drinks. Create an order application that provides the employee with input fields to enter the number of burgers, fries, and soft drinks that a customer orders. [10 marks]
The program is to display the total (before tax), the tax amount @ 13% (HST=13%), and the final cost.

The application output should look similar to:

Enter the number of burgers: 2
Enter the number of fries: 5
Enter the number of soft drinks: 5
Total before taxes: $19.38
Tax: $2.71
Final total: $22.09

Modify the program to include another input field that the employee uses to enter the amount s/he received from the customer. This is called the amount tendered.
A message is then to be displayed indicating the correct amount of change.
Enter amount tendered: $25.00
Change: $2.91

Write your code in the following space provided.

Public static void main(String[] args){

```
// Codes Sttarts Here
Scanner input = new Scanner (System.in);
//continue your code here..
```