

STIA1113

Quiz 1

1. In the Java programming language, all source code is first written in plain text files ending with the _____ extension.

- a. .javac
- b. .java
- c. .class
- d. .txt

Answer: __b. .java__

2. The Java compiler generates

- a. machine code
- b. source code
- c. byte code
- d. HTML

Answer: __c. byte code__

3. JVM stands for

- a. Java Variable Machine
- b. Java Variable Method
- c. Java Virtual Method
- d. Java Virtual Machine

Answer: __d. Java Virtual Machine__

4. Write a Java program to print the sum of two numbers.

Answer: _____

```
package QUIZ;
```

```
import java.util.Scanner;
```

```
public class Quiz1Q4 {
```

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

```

        Scanner scan = new Scanner (System.in);
        // TODO Auto-generated method stub
        int x = 0;
        int y = 0;
        int sum = 0;
        System.out.println("Please input integer x.");
        x = scan.nextInt();
        System.out.println("Please input integer y.");
        y = scan.nextInt();
        sum = x + y;
        System.out.println("The sum is : " + sum);

    }

}

```

5. Write the signature of the main method.

Answer: `public static void main(String[] args)`

6. These characters mark the beginning of a single-line comment.

- a. //
- b. /*
- c. */
- d. /**

Answer: `a. //`

7. Which of the following are not valid assignment statements?

- a. `sum = 9;`
- b. `72 = cost;`
- c. `price = 129;`
- d. `ans = 'y';`

Answer: `b. 72 = cost;`

8. Which of the following are valid Java identifiers?

- a. `myFirstProgram`
- b. `1stProgram`
- c. `Program1`

- d. David'sFirstProgram
- e. First Program
- f. FIRST_PROGRAM

Answer: ___a, c, f___

9. This is a named storage location in the computer's memory.

- a. class
- b. keyword
- c. variable
- d. operator

Answer: ___c. variable___

10. This keyword is used to declare a named constant.

- a. constant
- b. namedConstant
- c. final
- d. concrete

Answer: ___c. final___

11. Which of the following is not primitive data type?

- a. String
- b. double
- c. boolean
- d. int

Answer: ___a. String___

12. Write Java statements that accomplish the following.

- i. Declare int variables a and b.
- ii. Initialize an int variable x to 10 and a char variable ch to 'y'.
- iii. Declare and initialize a double variable payRate to 12.50.
- iv. Declare a boolean variable ans and set the value of ans to true.

Answer: i. int a, b;

- ii. `int x = 10; char ch = 'y';`
- iii. `double payRate = 12.50;`
- iv. `boolean ans = true;`

13. Write the output of the following expressions.

- i. `System.out.println(13 / 4);`
- ii. `System.out.println(2 + 12 / 4);`
- iii. `System.out.println(21 % 5);`
- iv. `System.out.println(3 - 5 % 7);`
- v. `System.out.println(17.0 / 4);`
- vi. `System.out.println(8 - 5 * 2.0);`
- vii. `System.out.println(14 + 5 % 2 - 3);`
- viii. `System.out.println(15.0 + 3 / 2);`

Answer: _____

- i. 3
- ii. 5
- iii. 1
- iv. -2
- v. 4.25
- vi. -2.0
- vii. 12
- viii. 16.0

14. What is the value of each variable after the last statement executes?

```
int a, b, c;  
double x, y;  
a = 17;  
b = 15;  
a = a + b / 4;  
c = a % 3 + 4;  
x = 17 / 3 + 6.5;  
y = a / 4.0 + 15 % 4 - 3.5;
```

Answer: _____

a = 20

b = 15

c = 6

x = 11.5

y = 4.5

15. Suppose x, y, and sum are int variables and z is a double variable. What value is assigned to sum variable after statement executes? Suppose x = 3, y = 5, and z = 14.1.

sum = x + y + (int) z;

Answer: __ 22__

16. Write equivalent statements using combined assignment for the following, if possible.

i. x = 2 * x;

ii. x = x + y - 2;

iii. sum = sum + num;

iv. y = y / (x + 5);

Answer:

i. x *= 2;

ii. x += y - 2;

iii. sum += num;

iv. y /= (x+5)

17. Change the SampleProgram.java program so that it displays Programming is fun! instead of Hello World!.

```
class SampleProgram
{
    public static void main(String[] args)
    {
        System.out.println("Hello World!");
    }
}
```

```
}
```

Answer: _____

```
class SampleProgram
{
    public static void main(String[] args)
    {
        System.out.println("Programming is fun!");
    }
}
```

18. The FixProgram.java has some errors. Fix the errors so that the program successfully compiles and runs.

```
class FixProgram
{
    public static void main(String[] args)
    {
        System.out.println('Hello World!')
    }
}
```

Answer: _____

```
class FixProgram
{
    public static void main(String[] args)
    {
        System.out.println("Hello World!");
    }
}
```