

TP 01 Introduction to Java programming language

Part Two (Setup):

Download and Install Java Development Kit (JDK):

- Go to the Oracle website or AdoptOpenJDK website to download the JDK installer for Windows.
- Run the installer and follow the installation instructions.
- After installation, set the `JAVA_HOME` environment variable to point to the JDK installation directory. This is typically located at `C:\Program Files\Java\jdk-version`.
- Open Notepad or any text editor. Type the following code:

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

- Save the file with the name `HelloWorld.java`.
- Press Win + R, type `cmd`, and press Enter.

Compile and Run:

- In the Command Prompt, navigate to the directory where `HelloWorld.java` is saved.
- Type `javac HelloWorld.java` and press Enter to compile.
- Then type `java HelloWorld` and press Enter to run.

Part Two (Hello world): ★☆☆☆☆

Task 1- Write a java program to print your information as shown in cart:

My name is : _____
Born on : _____
I have _____ Years old
I weight _____ Kg

Task 2- Write a Java program to calculate and print **the average** of three numbers.

Task 3- Write a Java program to find the value of the following expression:

- | | |
|--------------------------------------|--|
| a) $(101 + 0) / 3$ | d) <code>false && true</code> |
| b) $3.0e-6 * 10000000.1$ | e) <code>(false && false) (true && true)</code> |
| c) <code>true && true</code> | f) <code>(false false) && (true && true)</code> |

Task 4- Write a Java program to check whether the given number is even or odd.

Task 5- Consider the following code snippet:

```
1 int i = 10;  
2 int n = i++*5;
```

- What are the values of **i** and **n** after the code is executed?
- What are the final values of **i** and **n** if instead of using the postfix increment operator (**i++**), you use the prefix version (**++i**)?
- To invert the value of a **boolean**, which operator would you use?
- Which operator is used to compare two values, **=** or **==** ?

Task 6- Write a JAVA program to display default value of all primitive data type of JAVA (most of them)

Task 7- In the following program, explain why the value "6" is printed twice in a row:

```
1 class PrePostDemo {  
2     public static void main(String[] args){  
3         int i = 3;  
4         i++;  
5         System.out.println(i);    // "4"  
6         ++i;  
7         System.out.println(i);    // "5"  
8         System.out.println(++i);  // "6"  
9         System.out.println(i++);  // "6"  
10        System.out.println(i);    // "7"  
11    }  
12 }
```