

# Lab 01

## 1. Installation of IDE:



## 2. "Hello, World!" Program:

**Line 1 →** `public class HelloWorld {`

**Line 2 →** `public static void main(String[] args) {`

**Line 3 →** `System.out.println("Hello, World!");`

`}`

`}`

### Line 1 Explanation:

The keyword **public** allows the class to be accessible from any part of a Java program. The keyword **class** indicates that the following code is in class form, which is the basic structure in Java. The **HelloWorld** identifier is the class name, and the code within `{}` brackets is the part of this class.

### Line 2 Explanation:

The keyword **public** allows the **main** method to be accessible from outside the class. The keyword **static** allows the method to be called directly without creating an instance of the class. The keyword **void** indicates that this method returns no value. The **main** identifier is the name of the method. In Java, the JVM (Java Virtual Machine) first looks for the main method to start program execution, so it serves as the program's entry point. The parentheses following the main method contain the parameters for the method.

### Line 3 Explanation:

**System** is a predefined class, and **out** is a member of this class used to print output to the console. The **println** method is used to print to the console, with the argument within parentheses specifying what to print.