

Day 3 – Java Installation and First Program using Eclipse IDE

Objective:

To install and configure the Java Development Kit (JDK) and Eclipse IDE, and to write and execute the first Java program.

Content:

Today, I learned how to set up the **Java development environment** and wrote my first simple Java program using the **Eclipse IDE**.

Steps for Installation:

1. Installed JDK (Java Development Kit):

- Downloaded and installed the latest version of JDK from Oracle's official website.
- Configured environment variables (**JAVA_HOME** and **Path**) to run Java commands from the terminal.

```
Microsoft Windows [Version 10.0.26100.6725]
(c) Microsoft Corporation. All rights reserved.

C:\Users\preet\OneDrive\Documents\eclipse\java\jdk\jdk-25\bin>java -version
java version "25" 2025-09-16 LTS
Java(TM) SE Runtime Environment (build 25+37-LTS-3491)
Java HotSpot(TM) 64-Bit Server VM (build 25+37-LTS-3491, mixed mode, sharing)

C:\Users\preet\OneDrive\Documents\eclipse\java\jdk\jdk-25\bin>
```

2. Installed Eclipse IDE:

- Downloaded Eclipse IDE for Java Developers.
- Installed it and configured it to use the installed JDK.
- Created a new Java project for practice.

First Program:

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

Output:

```
Hello, World!
```

Explanation:

- `class HelloWorld`: Defines a class named HelloWorld.
- `public static void main(String[] args)`: Entry point of every Java program.
- `System.out.println()`: Prints text to the console.

Learning Outcome:

Successfully installed Java and Eclipse IDE, created the first Java project, and executed a simple program. Gained an understanding of the basic structure of a Java program and how to compile and run it using Eclipse.