**Day 31\_Java Assignment**

**1. Problem Description:**

What makes the Java platform independent?

**2. My Solution:**

* Java is platform independent because it uses the **Java Virtual Machine (JVM)** to execute bytecode, which is generated by compiling Java code. The JVM allows Java programs to run on any platform that has a compatible JVM installed.

**Example:**

* Imagine I have developed a Java program called “**HelloWorld.java**”, I compile this program using a Java compiler, which generates bytecode. The resulting bytecode file, **“HelloWorld.class”** contains instructions that are understood by the Java Virtual Machine.
* Now, I can take this “HelloWorld.class” file and run it on any platform that has a JVM installed. The JVM on each platform interprets the bytecode and executes the program, producing the familiar output.