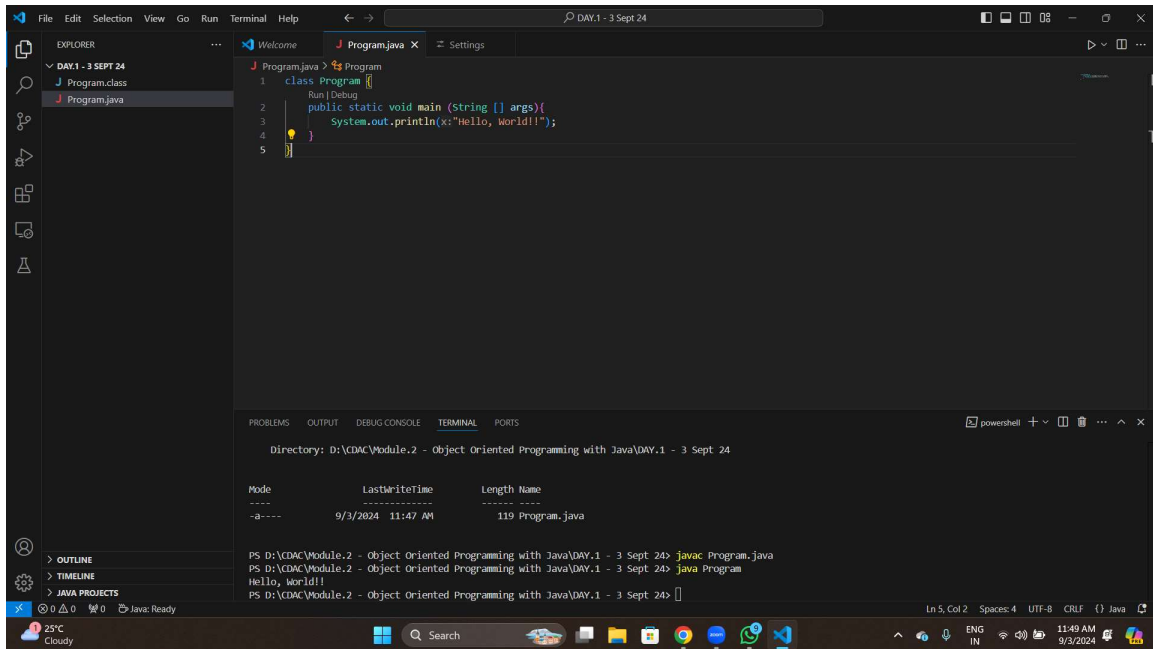# * <u>Coding Assignments</u>

• Hello World Program: Write a Java program that prints "Hello World!!" to the console.

-->>

```
class Program {

    public static void main ( String [] args ){

        System.out.println("Hello, World!!");
    }
}
```

• Compile with Verbose Option: Compile your Java file
using the -verbose option with javac. Check the output.

-->>

javac -verbose Program.java

```
Microsoft Windows [Version 10.0.22631.4112]
(c) Microsoft Corporation. All rights reserved.

D:\CDAC\Module.2 - Object Oriented Programming with Java>javac -verbose Program.java
[parsing started SimpleFileObject[D:\CDAC\Module.2 - Object Oriented Programming with Java\Program.java]]
[parsing completed 16ms]
[loading /modules/jdk.crypto.cryptoki/module-info.class]
[loading /modules/jdk.nio.mapmode/module-info.class]
[loading /modules/java.rmi/module-info.class]
[loading /modules/java.xml/module-info.class]
[loading /modules/jdk.jcmd/module-info.class]
[loading /modules/java.logging/module-info.class]
[loading /modules/jdk.accessibility/module-info.class]
[loading /modules/jdk.javadoc/module-info.class]
[loading /modules/jdk.httpserver/module-info.class]
[loading /modules/jdk.internal.vm.compiler/module-info.class]
[loading /modules/jdk.jstatd/module-info.class]
[loading /modules/java.base/module-info.class]
[loading /modules/jdk.internal.opt/module-info.class]
[loading /modules/jdk.jlink/module-info.class]
[loading /modules/jdk.internal.jvmstat/module-info.class]
[loading /modules/jdk.crypto.ec/module-info.class]
[loading /modules/jdk.net/module-info.class]
[loading /modules/jdk.security.jgss/module-info.class]
[loading /modules/java.scripting/module-info.class]
[loading /modules/java.sql/module-info.class]
[loading /modules/jdk.naming.dns/module-info.class]
[loading /modules/java.datatransfer/module-info.class]
[loading /modules/java.transaction.xa/module-info.class]
[loading /modules/jdk.naming.rmi/module-info.class]
[loading /modules/jdk.security.auth/module-info.class]
[loading /modules/jdk.management/module-info.class]
[loading /modules/jdk.crypto.mscapi/module-info.class]
[loading /modules/jdk.internal.le/module-info.class]
[loading /modules/java.security.jgss/module-info.class]
[loading /modules/java.security.sasl/module-info.class]
[loading /modules/jdk.internal.vm.ci/module-info.class]
[loading /modules/java.instrument/module-info.class]
[loading /modules/java.desktop/module-info.class]
[loading /modules/java.sql.rowset/module-info.class]
[loading /modules/jdk.sctp/module-info.class]
[loading /modules/jdk.jfr/module-info.class]
[loading /modules/jdk.jpackage/module-info.class]
[loading /modules/jdk.jdeps/module-info.class]
[loading /modules/java.net.http/module-info.class]
[loading /modules/jdk.jdwp.agent/module-info.class]
[loading /modules/jdk.attach/module-info.class]
[loading /modules/java.management/module-info.class]
[loading /modules/jdk.internal.vm.compiler.management/module-info.class]
[loading /modules/jdk.incubator.vector/module-info.class]
```

```
[loading /modules/java.management.rmi/module-info.class]
[loading /modules/jdk.compiler/module-info.class]
[loading /modules/jdk.jdi/module-info.class]
[loading /modules/jdk.management.agent/module-info.class]
[loading /modules/jdk.jshell/module-info.class]
[loading /modules/jdk.internal.ed/module-info.class]
[loading /modules/java.se/module-info.class]
[loading /modules/java.compiler/module-info.class]
[loading /modules/jdk.unsupported/module-info.class]
[loading /modules/java.xml.crypto/module-info.class]
[loading /modules/java.smartcardio/module-info.class]
[loading /modules/jdk.dynalink/module-info.class]
[loading /modules/jdk.zipfs/module-info.class]
[loading /modules/jdk.xml.dom/module-info.class]
[loading /modules/jdk.hotspot.agent/module-info.class]
[loading /modules/jdk.localedata/module-info.class]
[loading /modules/jdk.management.jfr/module-info.class]
[loading /modules/jdk.editpad/module-info.class]
[loading /modules/jdk.charsets/module-info.class]
[loading /modules/jdk.jartool/module-info.class]
[loading /modules/jdk.jsobject/module-info.class]
[loading /modules/jdk.unsupported.desktop/module-info.class]
[loading /modules/jdk.random/module-info.class]
[search path for source files: .]
[search path for class files: C:\Program Files\Java\jdk-17\lib\modules,.]
[loading /modules/java.base/java/lang/Object.class]
[loading /modules/java.base/java/lang/String.class]
[loading /modules/java.base/java/lang/Deprecated.class]
[loading /modules/java.base/java/lang/annotation/Retention.class]
[loading /modules/java.base/java/lang/annotation/RetentionPolicy.class]
[loading /modules/java.base/java/lang/annotation/Target.class]
[loading /modules/java.base/java/lang/annotation/ElementType.class]
[checking Program]
[loading /modules/java.base/java/io/Serializable.class]
[loading /modules/java.base/java/lang/AutoCloseable.class]
[loading /modules/java.base/java/lang/System.class]
[loading /modules/java.base/java/io/PrintStream.class]
[loading /modules/java.base/java/lang/Appendable.class]
[loading /modules/java.base/java/io/Closeable.class]
[loading /modules/java.base/java/io/FilterOutputStream.class]
[loading /modules/java.base/java/io/OutputStream.class]
[loading /modules/java.base/java/io/Flushable.class]
[loading /modules/java.base/java/lang/Comparable.class]
[loading /modules/java.base/java/lang/CharSequence.class]
[loading /modules/java.base/java/lang/constant/Constable.class]
[loading /modules/java.base/java/lang/constant/ConstantDesc.class]
[wrote Program.class]
[total 230ms]

D:\CDAC\Module.2 - Object Oriented Programming with Java>
```
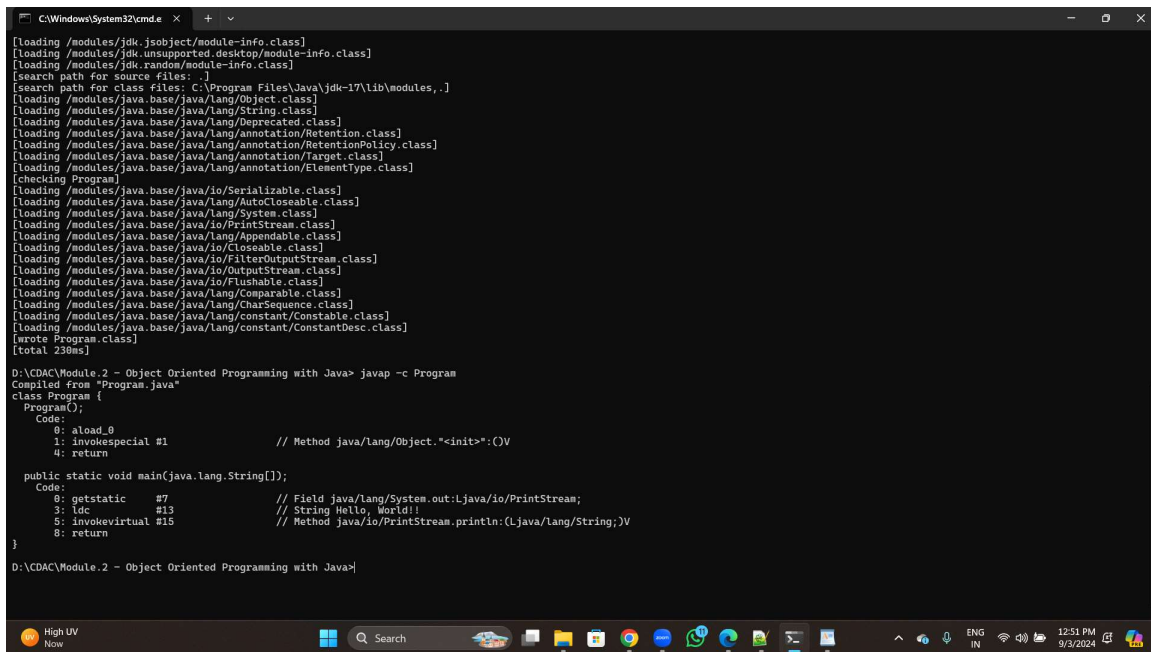
- Inspect Bytecode: Use the javap tool to examine the

bytecode of the compiled .class file. Observe the output.

-->>

javap -c Program