ASSIGNMENT NO.1

1. Reading Assignment: A Short History of Java

- **Task**: Read about the history and development of Java.
- **Link**: http://sunsite.uakom.sk/sunworldonline/swol-07-1995/swol-07-java.html

2. Reading Assignment: Java Language Features

- **Task**: Learn about the main features of Java.
- **Link**: https://javaalmanac.io/features/

3. Reading Assignment: Which Version of JDK Should I Use?

- **Task**: Find out which JDK version is right for you.
- **Link**: https://whichjdk.com/

4. Reading Assignment: JDK Installation Directory Structure

- **Task**: Understand the folder structure and files in the JDK installation.
- **Link**: https://docs.oracle.com/javase/8/docs/technotes/tools/windows/jdkfiles.html

5. Reading Assignment: About Java Technology

- **Task**: Read about the basics of Java technology and its components.
- **Link**: https://docs.oracle.com/javase/tutorial/getStarted/intro/definition.html

6. Coding Assignments

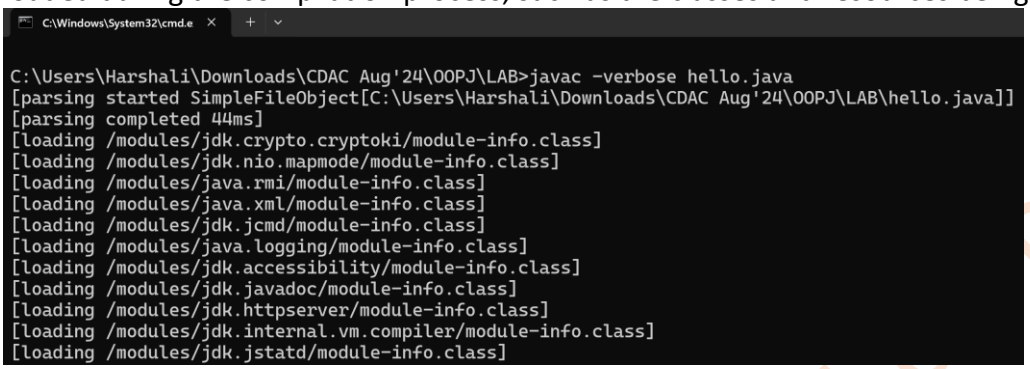
1. **Hello World Program**: Write a Java program that prints "Hello World!!" to the console.

hello.java

```
1  class hello{
2      public static void main(String[] args){
3          System.out.println("Hello, World!!");
4      }
5
6  }
```

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

Ans. The -verbose option displays the additional information about the files being loaded during the compilation process, such as the classes and resources being used.



3. **Inspect Bytecode**: Use the `javap` tool to examine the bytecode of the compiled `.class` file. Observe the output.

   Ans. This output shows the JVM instructions for each method in the HelloWorld class. For example, it shows how the main method loads the System.out object and calls the println method with the "Hello World!!" string.

7. Reading Assignment: The JVM Architecture Explained

- **Task**: Learn about how the Java Virtual Machine (JVM) works.
- **Link**: https://dzone.com/articles/jvm-architecture-explained

8. Reading Assignment: The Java Language Environment: Contents

- **Task**: Explore the content and features of the Java language environment.
- **Link**: https://www.oracle.com/java/technologies/language-environment.html