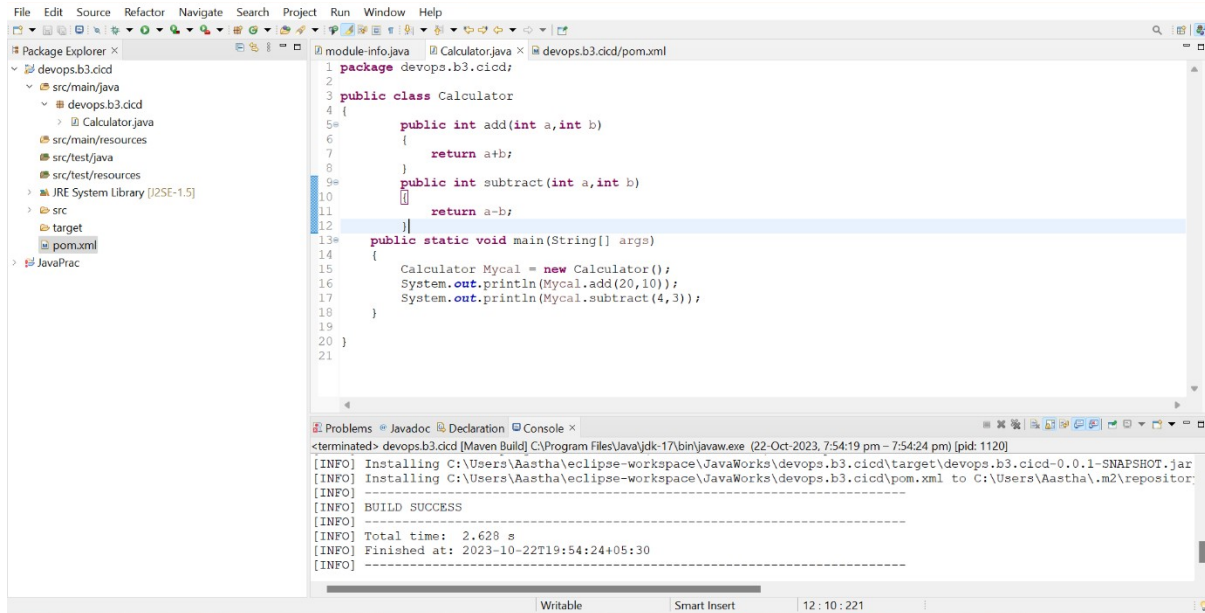


Lab-2

Creating Jenkins Pipeline with a Jenkins File

Step1 -> Create a simple maven project

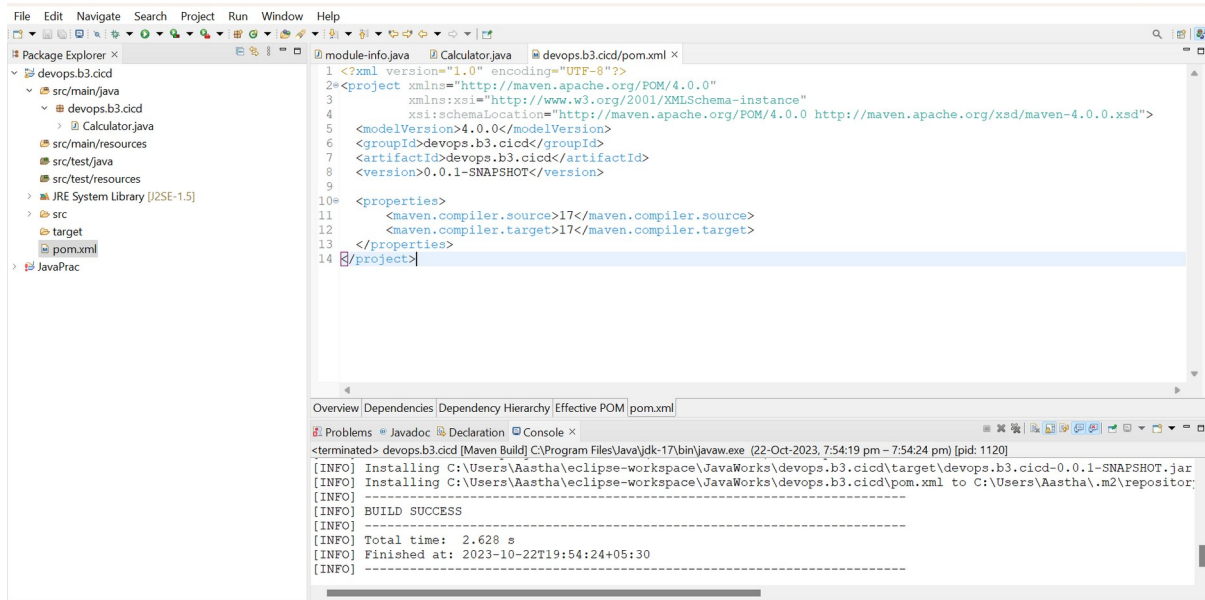


The screenshot shows the Eclipse IDE interface. The Package Explorer on the left displays the project structure for 'devops.b3.cicd', including 'src/main/java' (containing 'Calculator.java'), 'src/main/resources', 'src/test/java', 'src/test/resources', 'src', 'target', and 'pom.xml'. The main editor shows the 'Calculator.java' file with the following code:

```
1 package devops.b3.cicd;
2
3 public class Calculator
4 {
5     public int add(int a,int b)
6     {
7         return a+b;
8     }
9     public int subtract(int a,int b)
10    {
11        return a-b;
12    }
13    public static void main(String[] args)
14    {
15        Calculator Mycal = new Calculator();
16        System.out.println(Mycal.add(20,10));
17        System.out.println(Mycal.subtract(4,3));
18    }
19 }
20 }
21 }
```

The Console window at the bottom shows the Maven build output:

```
<terminated> devops.b3.cicd [Maven Build] C:\Program Files\Java\jdk-17\bin\javaw.exe (22-Oct-2023, 7:54:19 pm - 7:54:24 pm) [pid: 1120]
[INFO] Installing C:\Users\Aastha\workspace\JavaWorks\devops.b3.cicd\target\devops.b3.cicd-0.0.1-SNAPSHOT.jar
[INFO] Installing C:\Users\Aastha\workspace\JavaWorks\devops.b3.cicd\pom.xml to C:\Users\Aastha\.m2\repository
[INFO] BUILD SUCCESS
[INFO] Total time: 2.628 s
[INFO] Finished at: 2023-10-22T19:54:24+05:30
[INFO]
```



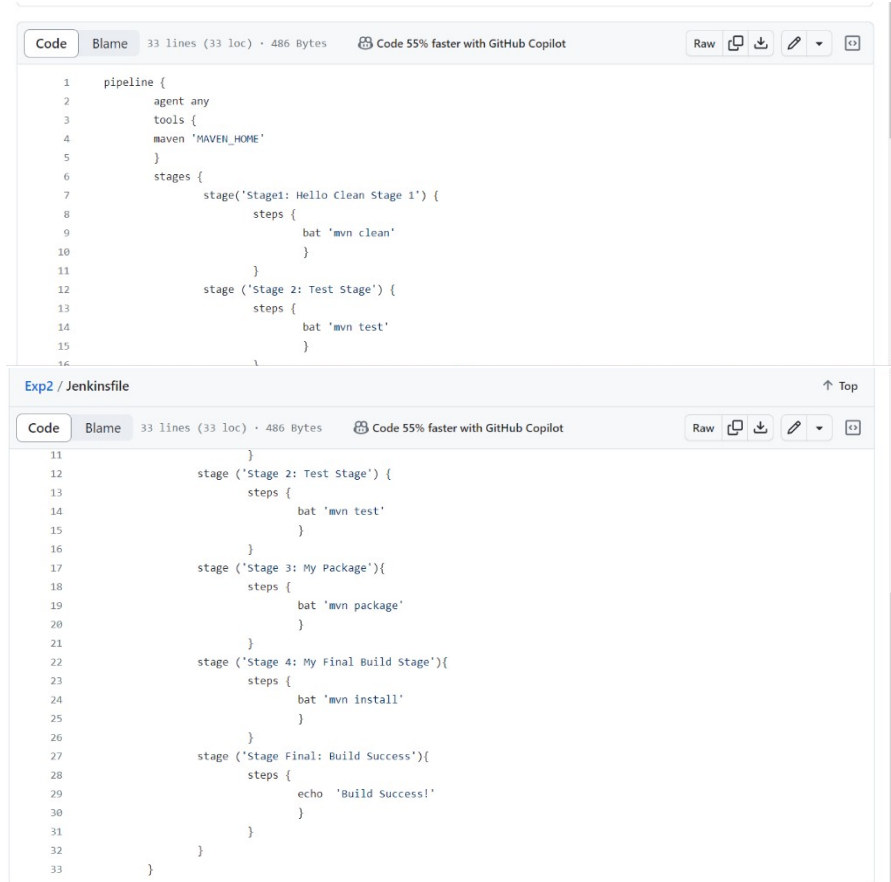
The screenshot shows the Eclipse IDE interface with the 'pom.xml' file open in the main editor. The Package Explorer on the left shows the same project structure as the previous screenshot. The 'pom.xml' file contains the following XML code:

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <project xmlns="http://maven.apache.org/POM/4.0.0"
3         xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
4         xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">
5     <modelVersion>4.0.0</modelVersion>
6     <groupId>devops.b3.cicd</groupId>
7     <artifactId>devops.b3.cicd</artifactId>
8     <version>0.0.1-SNAPSHOT</version>
9
10    <properties>
11        <maven.compiler.source>17</maven.compiler.source>
12        <maven.compiler.target>17</maven.compiler.target>
13    </properties>
14 </project>
```

The Console window at the bottom shows the Maven build output, which is identical to the previous screenshot:

```
<terminated> devops.b3.cicd [Maven Build] C:\Program Files\Java\jdk-17\bin\javaw.exe (22-Oct-2023, 7:54:19 pm - 7:54:24 pm) [pid: 1120]
[INFO] Installing C:\Users\Aastha\workspace\JavaWorks\devops.b3.cicd\target\devops.b3.cicd-0.0.1-SNAPSHOT.jar
[INFO] Installing C:\Users\Aastha\workspace\JavaWorks\devops.b3.cicd\pom.xml to C:\Users\Aastha\.m2\repository
[INFO] BUILD SUCCESS
[INFO] Total time: 2.628 s
[INFO] Finished at: 2023-10-22T19:54:24+05:30
[INFO]
```

Step 2 -> Then create a simple Jenkins file with defining pipeline



```
1 pipeline {
2   agent any
3   tools {
4     maven 'MAVEN_HOME'
5   }
6   stages {
7     stage('Stage1: Hello Clean Stage 1') {
8       steps {
9         bat 'mvn clean'
10      }
11    }
12    stage ('Stage 2: Test Stage') {
13      steps {
14        bat 'mvn test'
15      }
16    }
17    stage ('Stage 3: My Package'){
18      steps {
19        bat 'mvn package'
20      }
21    }
22    stage ('Stage 4: My Final Build Stage'){
23      steps {
24        bat 'mvn install'
25      }
26    }
27    stage ('Stage Final: Build Success'){
28      steps {
29        echo 'Build Success!'
30      }
31    }
32  }
33 }
```

Step 3 → Now run it on Jenkins

```
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time:  5.062 s
[INFO] Finished at: 2023-12-03T14:03:24+05:30
[INFO] -----
Waiting for Jenkins to finish collecting data
[JENKINS] Archiving /var/lib/jenkins/workspace/jenkins-lab1/pom.xml to devopsb3lab2/devopsb3lab2/0.0.1-SNAPSHOT/devopsb3lab2-0.0.1-SNAPSHOT.pom
[JENKINS] Archiving /var/lib/jenkins/workspace/jenkins-lab1/target/My-B3-CALC.jar to devopsb3lab2/devopsb3lab2/0.0.1-SNAPSHOT/devopsb3lab2-0.0.1-SNAPSHOT.jar
channel stopped
Finished: SUCCESS
```



This run spent:

- 0.18 sec waiting;
- 16 sec build duration;
- 17 sec total from scheduled to completion.



Revision: 11cd2daf58b950fd34a2023dddafae6656aeb9c2

Repository: <https://github.com/ArnimTaliyan/cicd-lab1.git>

- refs/remotes/origin/main

Module Builds



devopsb3lab2

4.5 sec