**JENKINS ASSIGNMENT 3**

**2️. CI/CD Pipeline for a Java Web Application**

**Steps:**

1. **Create a Jenkins job** for a Java project.
2. **Pull code from GitHub**.
3. **Compile and package using Maven**.
4. **Run unit tests**.
5. **Deploy the artifact to a Tomcat server**.

**Jenkins Pipeline Script (Jenkinsfile)**

groovy

CopyEdit

pipeline {

agent any

stages {

stage('Clone Repository') {

steps {

git 'https://github.com/your-repo/java-webapp.git'

}

}

stage('Build') {

steps {

sh 'mvn clean package'

}

}

stage('Test') {

steps {

sh 'mvn test'

}

}

stage('Deploy to Tomcat') {

steps {

sh 'scp target/\*.war user@server:/var/lib/tomcat/webapps/'

}

}

}

}

**Solution:**

* Automates the build and testing process.
* Deploys the .war file to Tomcat for continuous delivery.
* Can be scheduled to trigger on code changes.