Introduction to Maven

Apache Maven is a powerful build automation tool primarily used for Java projects. It simplifies dependency management, builds projects efficiently, and supports plugins to extend functionalities.

Installing Maven on Amazon Linux Steps:

- 1.take 1 EC2 instance & login.
- 2.connect to Linux emvironment.
- 3. Installing Java on Amazon Linux

Method 1: Install Amazon Corretto (Recommended)

```
sudo yum install -y java-1.8.0-amazon-corretto.x86 64
```

Verify installation:

java -version

Method 2: Install Java 17 (If Required)

sudo yum install -y java-17-amazon-corretto.x86 64

Set the default Java version (if multiple versions exist):

sudo alternatives --config java

- **4.** install git
- 5. Install from Amazon Linux mayen

sudo yum install -y maven

Verify installation:

mvn -version

- 6. clone the the git URL
- **7.** cd filename(pom.xml)

A standard Maven project follows this structure:

```
∟ myweb
       - 123Dockerfile
      - Dockerfile
        Jenkins-ansible
       - Jenkins-appnew
- Jenkins-decdemo
       - Jenkins-decnew
       - Jenkins-docker
       - Jenkins-kube
       - Jenkins-sonar-nexus-tomcat
       - Jenkins-terraform
       - Jenkinsfile
      Jenkinsfile007
      — Jenkinsfile2
      appspec.yml
      - azure-pipelines.yml
       buildspec.yml
      - copy.yml
- deployments.yml
      – dev.in
      - docker-ci-cd
      - dummy.sh

    kuberneeteswork

       - kubernetes-ci-cd
      - main.tf
       - pom.xml
       setenv.sh
       sftp_tomcat.sh
       - springBoot.yml
        src
           – main
                 java
                         iavahome
                             - myweb
                                  controller
                                   └─ Calculator.java
                 webapp
                     WEB-INF
                        - web.xml
                     index.jsp
            test
                 java
                         iavahome
                             - myweb
                                 controller
                                   └─ CalculatorTest.java
        start_tomcat.sh
        stop_tomcat.sh
        target
           - sonar
               report-task.txt
       upload_docker_image_to_nexus
       var.tf
```

├── vasu.xml ├── war-ci-cd-tomcat

18 directories, 39 files