We will deploy java app manually via maven

launch a ubuntu ec2 instance with ssh port enabled
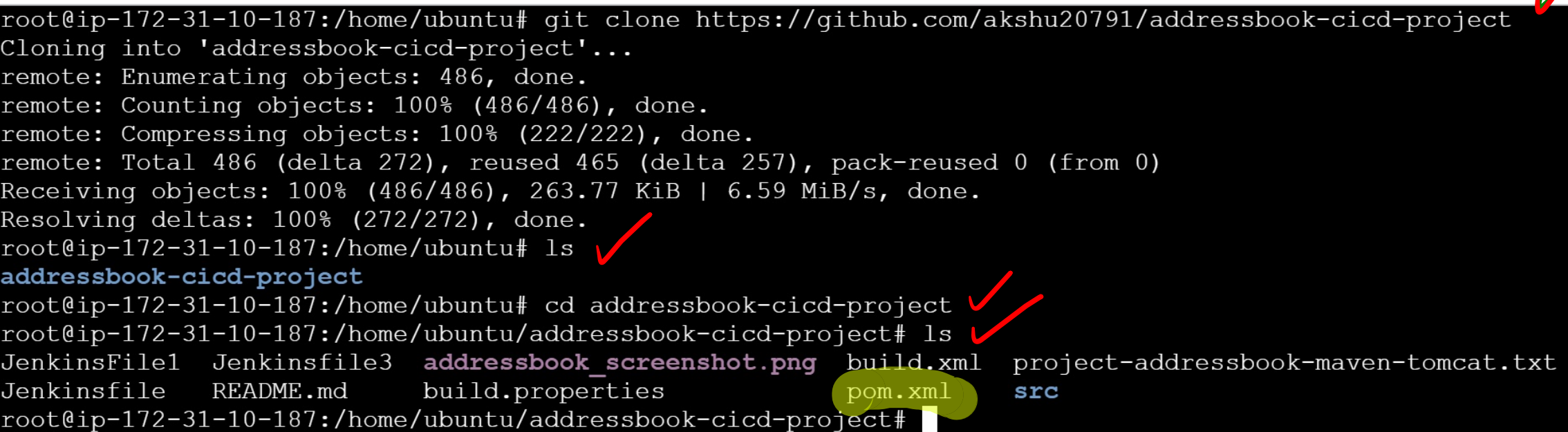
connect to the machine

sudo su

apt update

apt install maven -y

```
root@ip-172-31-10-187:/home/ubuntu# mvn --version
Apache Maven 3.8.7
Maven home: /usr/share/maven
Java version: 21.0.7, vendor: Ubuntu, runtime: /usr/lib/jvm/java-21-openjdk-amd64
Default locale: en, platform encoding: UTF-8
OS name: "linux", version: "6.8.0-1024-aws", arch: "amd64", family: "unix"
root@ip-172-31-10-187:/home/ubuntu# 
```

git clone https://github.com/akshu20791/addressbook-cicd-project

```
root@ip-172-31-10-187:/home/ubuntu# git clone https://github.com/akshu20791/addressbook-cicd-project
Cloning into 'addressbook-cicd-project'...
remote: Enumerating objects: 486, done.
remote: Counting objects: 100% (486/486), done.
remote: Compressing objects: 100% (222/222), done.
remote: Total 486 (delta 272), reused 465 (delta 257), pack-reused 0 (from 0)
Receiving objects: 100% (486/486), 263.77 KiB | 6.59 MiB/s, done.
Resolving deltas: 100% (272/272), done.
root@ip-172-31-10-187:/home/ubuntu# ls
addressbook-cicd-project
root@ip-172-31-10-187:/home/ubuntu# cd addressbook-cicd-project
root@ip-172-31-10-187:/home/ubuntu/addressbook-cicd-project# ls
JenkinsFile1   Jenkinsfile3   addressbook_screenshot.png   build.xml   project-addressbook-maven-tomcat.txt
Jenkinsfile    README.md      build.properties             pom.xml     src
root@ip-172-31-10-187:/home/ubuntu/addressbook-cicd-project#
```

How can i compile the project ?
how can i package the project?
how can i deploy the project? - this will not happen via maven

THIS CAN BE ACHIEVED VIA:
https://maven.apache.org/guides/introduction/introduction-to-the-lifecycle.html

A Build Lifecycle is Made Up of Phases

Each of these build lifecycles is defined by a different list of build phases, wherein a build phase represents a stage in the lifecycle.

For example, the default lifecycle comprises of the following phases (for a complete list of the lifecycle phases, refer to the Lifecycle Reference):

- `validate` - validate the project is correct and all necessary information is available
- `compile` - compile the source code of the project
- `test` - test the compiled source code using a suitable unit testing framework. These tests should not require the code be packaged or deployed
- `package` - take the compiled code and package it in its distributable format, such as a JAR.
- `verify` - run any checks on results of integration tests to ensure quality criteria are met
- `install` - install the package into the local repository, for use as a dependency in other projects locally
- `deploy` - done in the build environment, copies the final package to the remote repository for sharing with other developers and projects.

```
root@ip-172-31-10-187:/home/ubuntu/addressbook-cicd-project# mvn compile   ✓
```

This command will compile the project for me

```
root@ip-172-31-10-187:/home/ubuntu/addressbook-cicd-project# mvn package
```

```
Downloaded from central: https://repo.maven.apache.org/maven2/javax/inject/javax.inject/1/javax.inj
Downloaded from central: https://repo.maven.apache.org/maven2/javax/annotation/jsr250-api/1.0/jsr250
Downloaded from central: https://repo.maven.apache.org/maven2/javax/inject/javax.inject/1/javax.inje
[INFO] Packaging webapp
[INFO] Assembling webapp [addressbook] in [/home/ubuntu/addressbook-cicd-project/target/addressbook]
[INFO] Processing war project
[INFO] Building war: /home/ubuntu/addressbook-cicd-project/target/addressbook.war
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time:  11.348 s
[INFO] Finished at: 2025-05-29T16:11:47Z
```

```
root@ip-172-31-10-187:/home/ubuntu/addressbook-cicd-project# cd /home/ubuntu/addressbook-cicd-project/target/
root@ip-172-31-10-187:/home/ubuntu/addressbook-cicd-project/target# ls
addressbook       classes          generated-test-sources   maven-status      test-classes
addressbook.war   generated-sources  maven-archiver          surefire-reports
root@ip-172-31-10-187:/home/ubuntu/addressbook-cicd-project/target#
```

location
marked in
previous
document

Now we will deploy addressbook.war to tomcat