umit Barkade
.NO: 03
E-IT

DevOps

Date 09.

Experiment no: 5

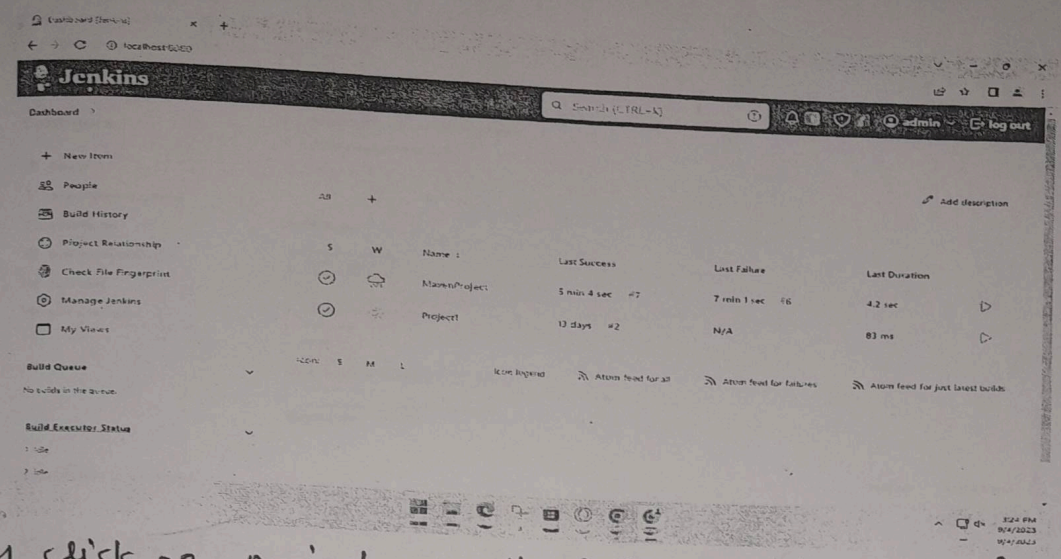
Aim: To build the pipeline jobs using Maven/ Gradle/Ant in Jenkins. create a pipeline to test & deploy application.

pre-requisites: 1) Ensure jenkins is installed & running
2) Have your applications source code hosted in a version control system like Git.

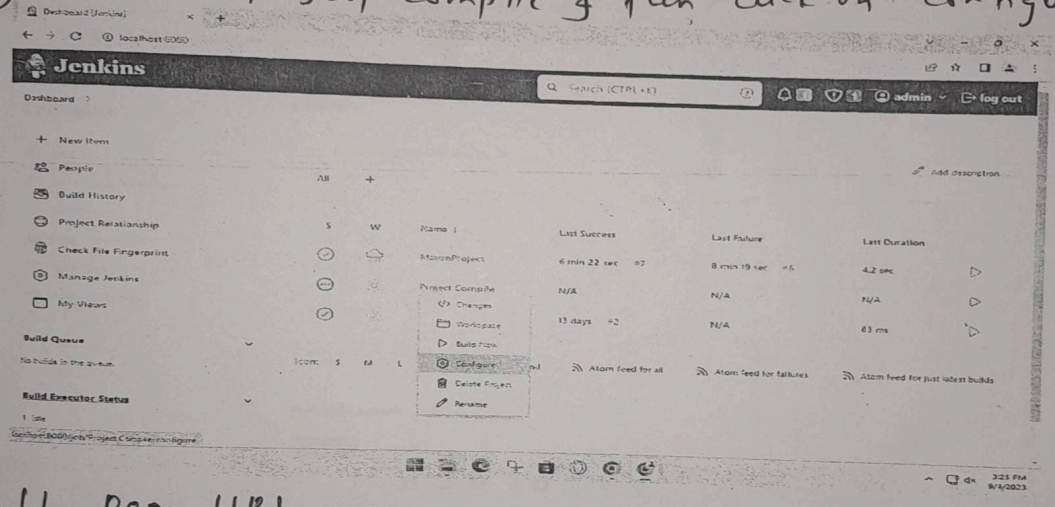
Theory:- DevOps professionals mostly work with pipelines because pipelines can automate the processes like building, testing & deploying this application. with the help of continuous integration / continuous deployment (CI/CD) pipeline we can automate the whole process which will increase productivity. In computing, a pipeline is a set of stages or processes linked together to form a processing system.

CI means whenever, new code is committed to remote repositories like Github. CI will continuously build, tested & merged into shared repository. CD means automating the further stages of pipeline automatically or manually deploying the application / code to different environment

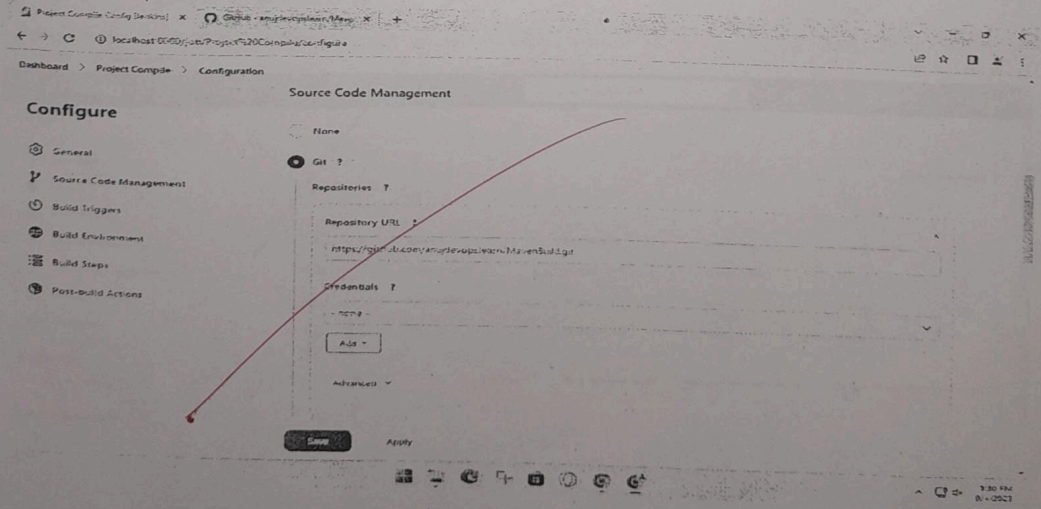
step 1) open Jenkins by typing localhost:8080 on chrome



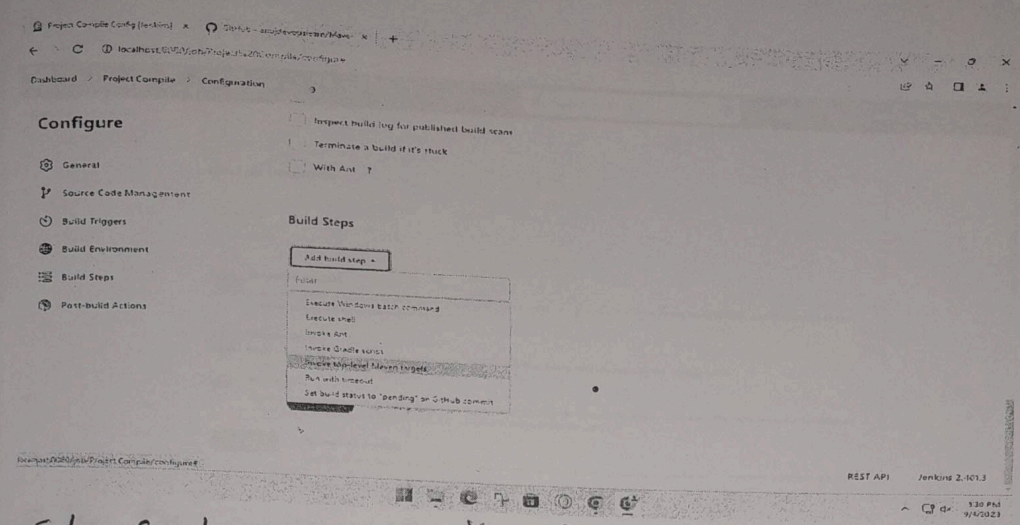
step 2) click on project compile & then click on configure.



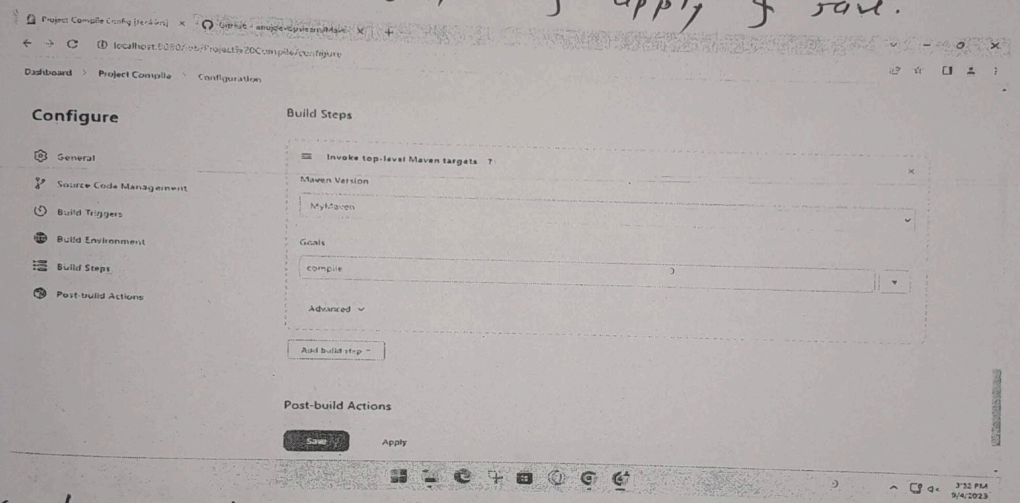
3) Add Repo URL



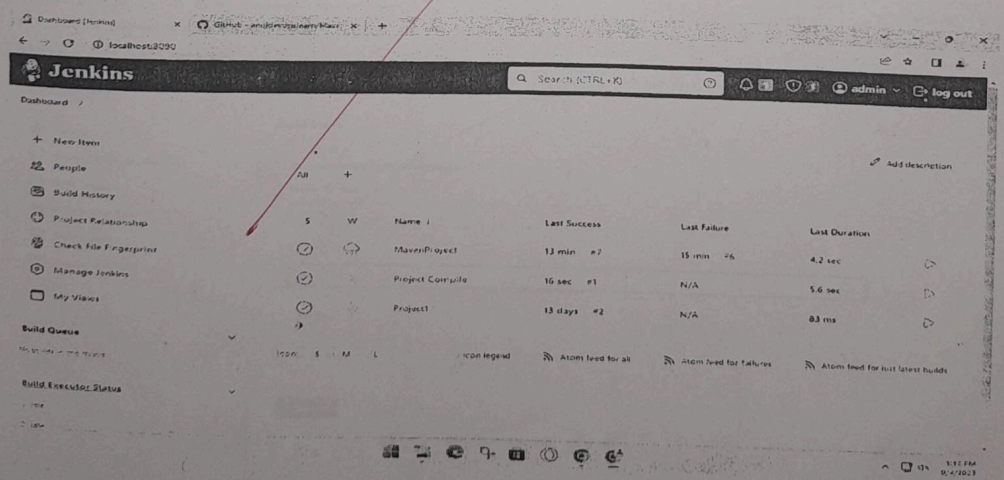
4) Go in Build environment & select Invoke top-level maven integrator.



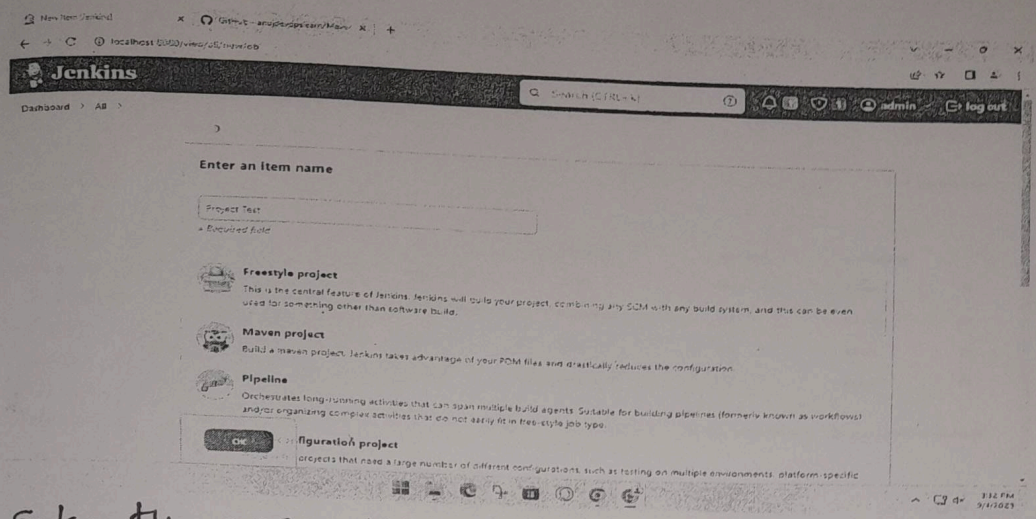
5) Set Goals as compile & apply & save.



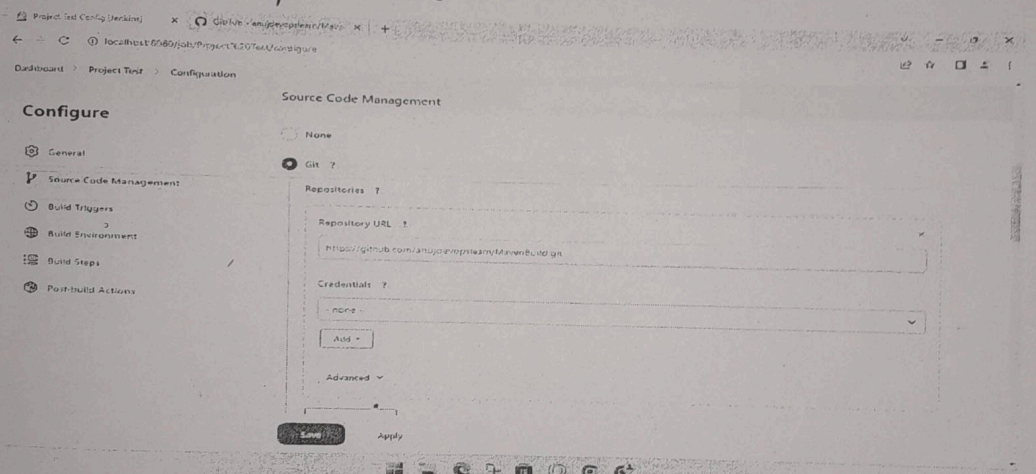
6) Go to Dashboard



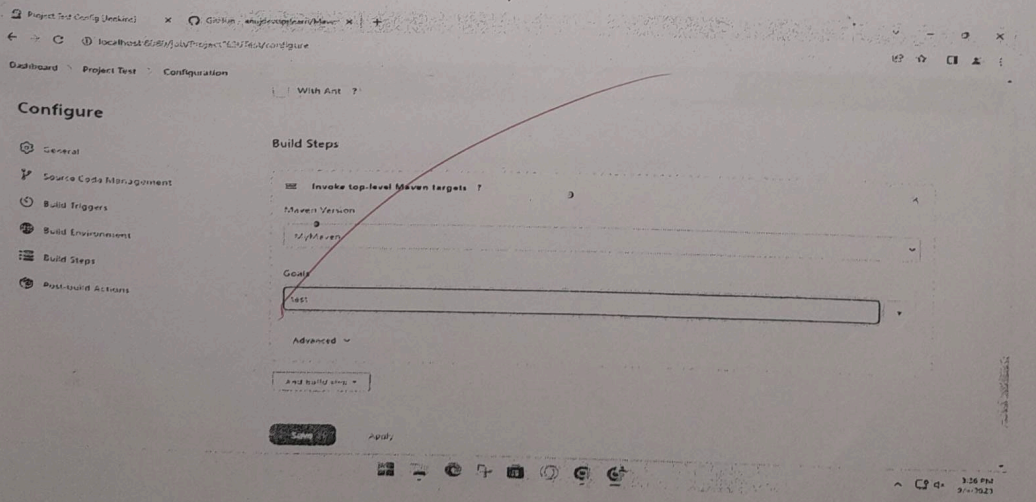
7) create dev. item then formed project test.



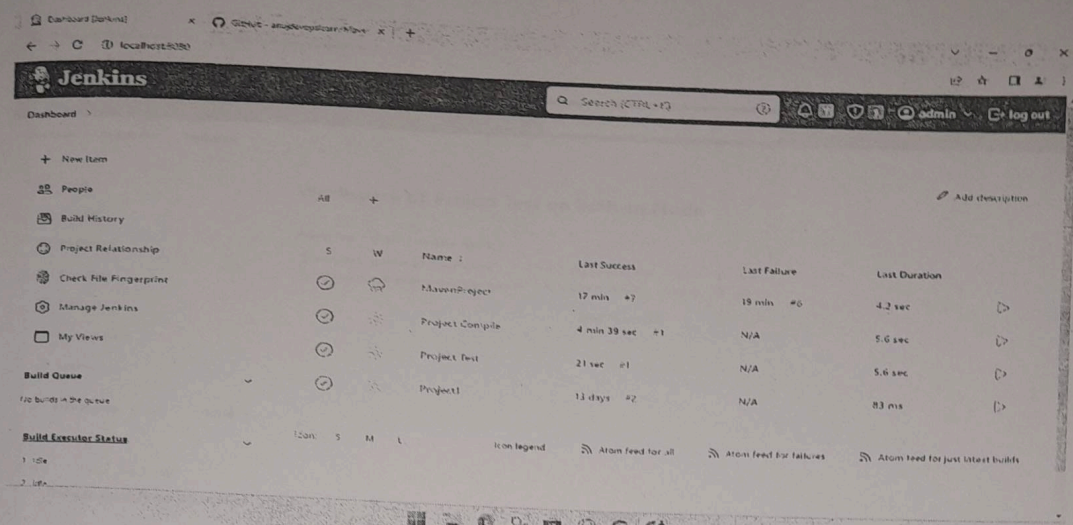
8) Enter the repo URL



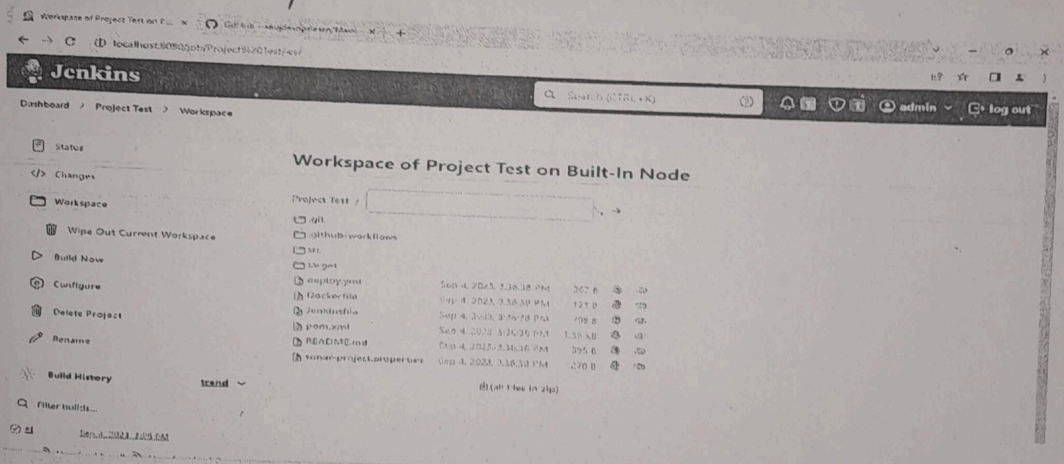
9) set the goals as test



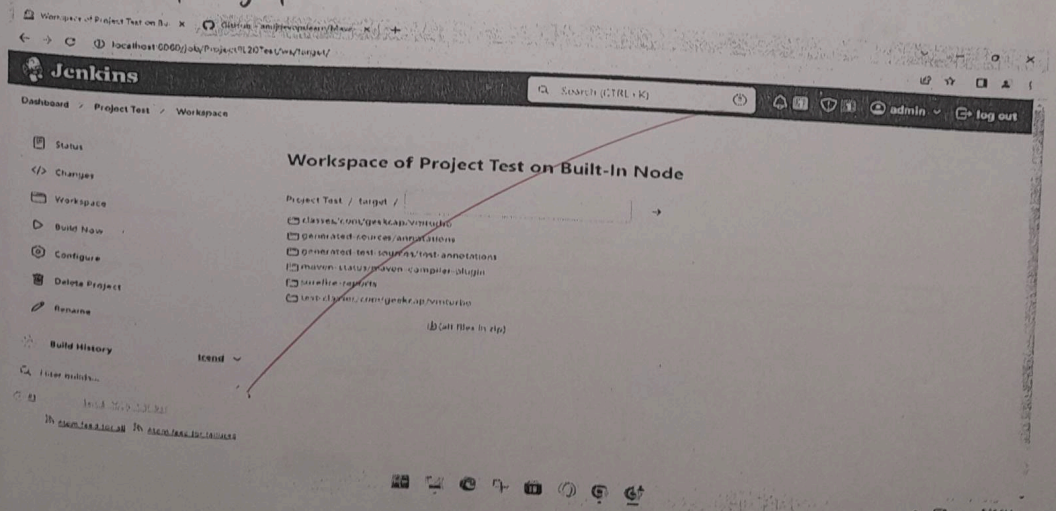
10) Go back to dashboard



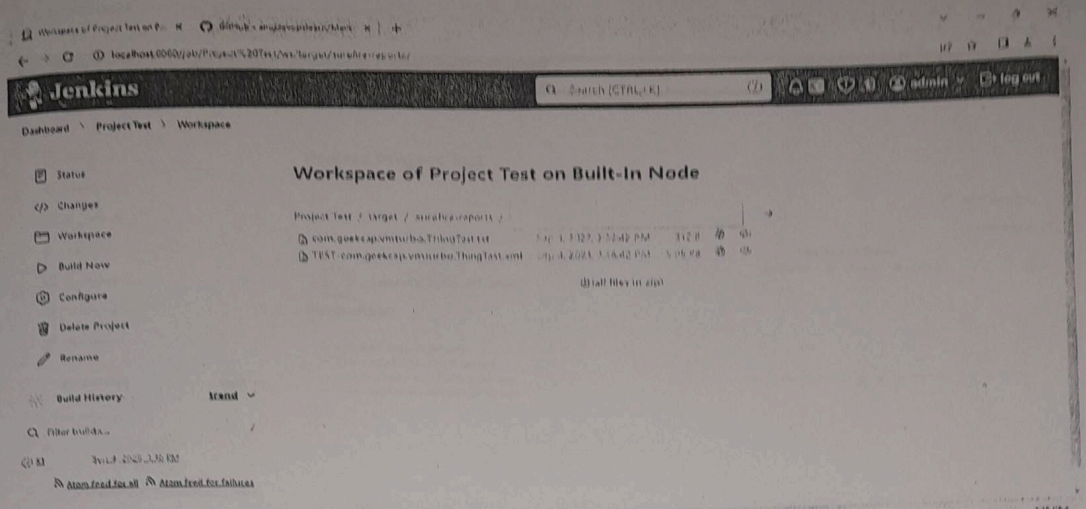
11) Go to workspace



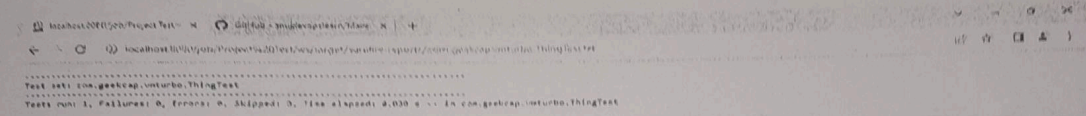
12) Go to target



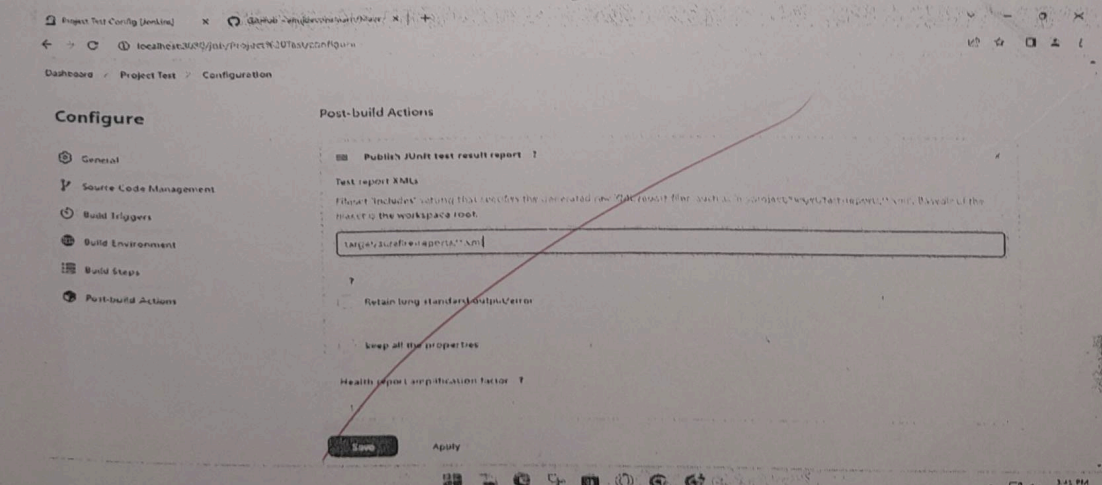
13) Go to surefire-reports



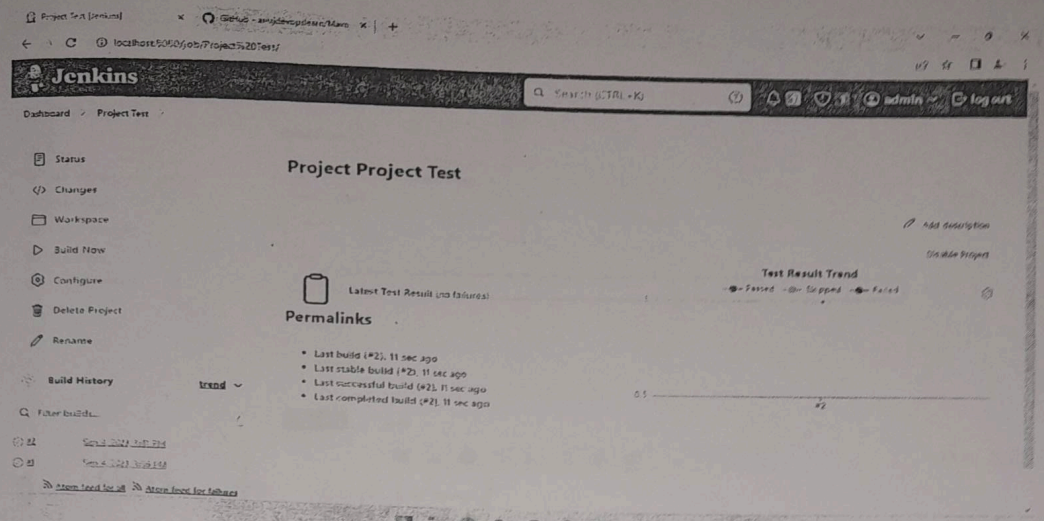
14) open the xml file



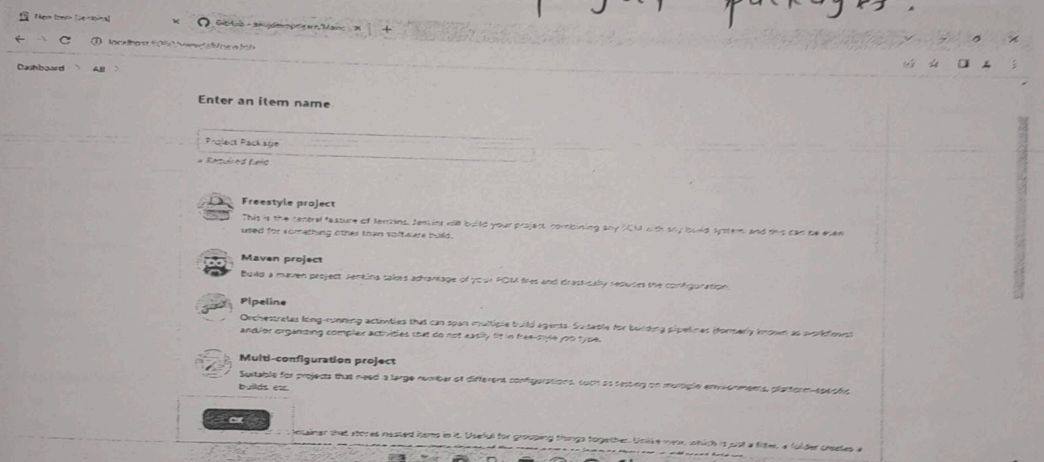
15) open the configuration & enter xml file



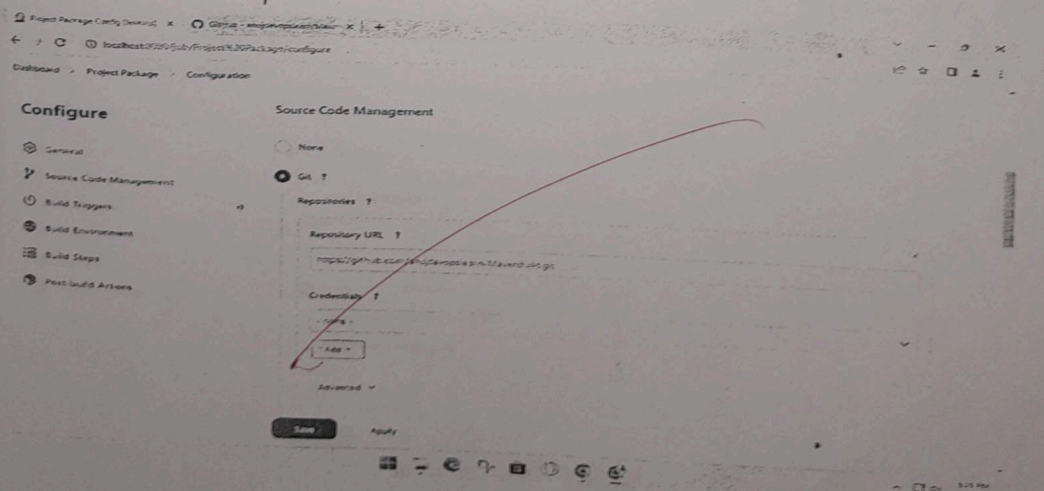
16) go to project test status



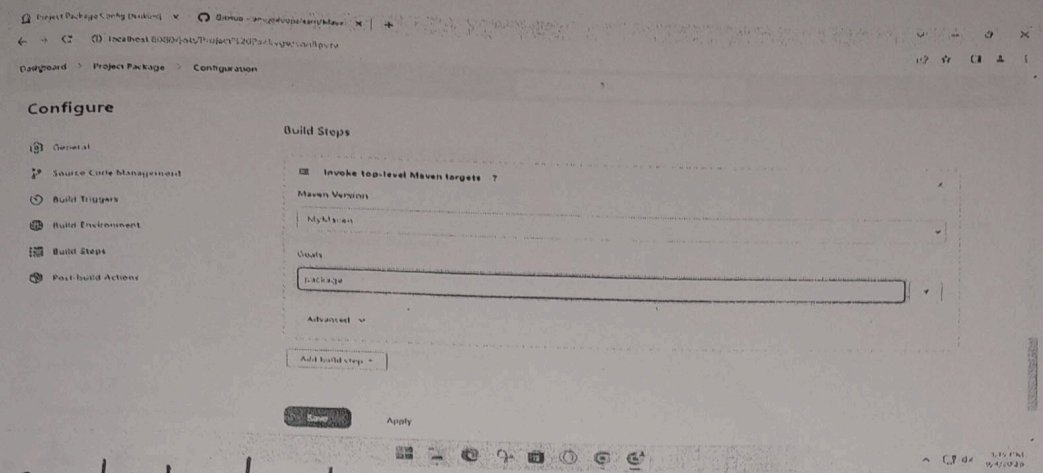
17) create new item named project packages.



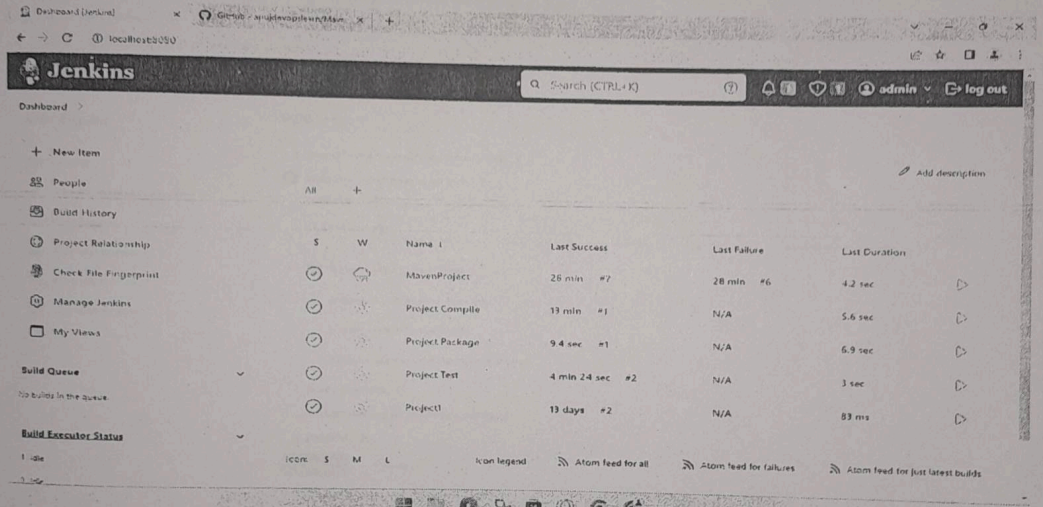
18) Enter the repo URL



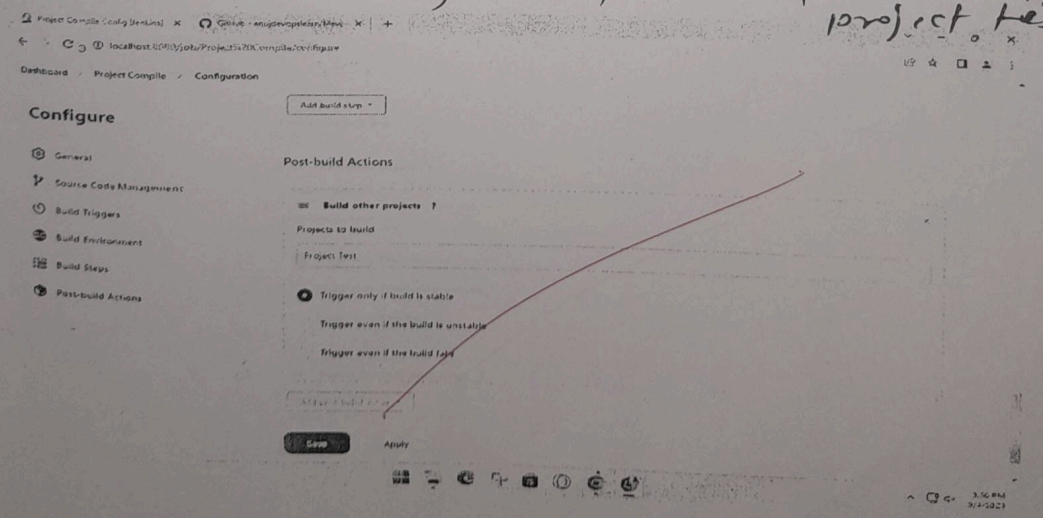
19) set goals as packages



20) go back to dashboard



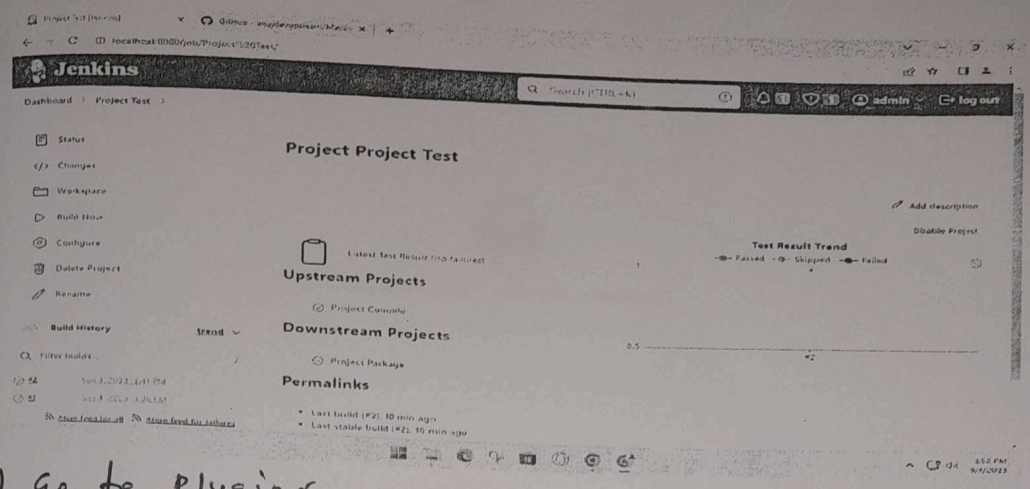
21) Go to configuration of set project to build as project Test



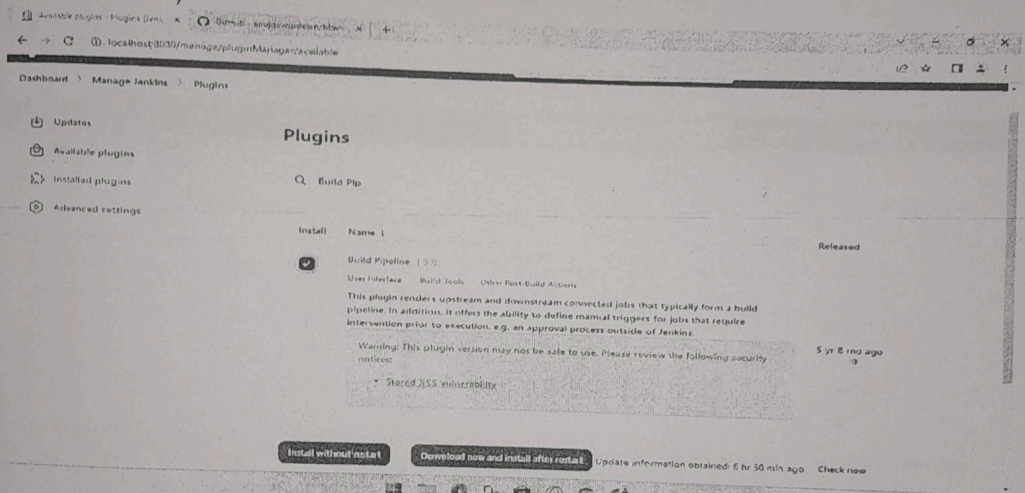
23) go to project test configuration & set project to watch as project Compile.

24) project to build is project package.

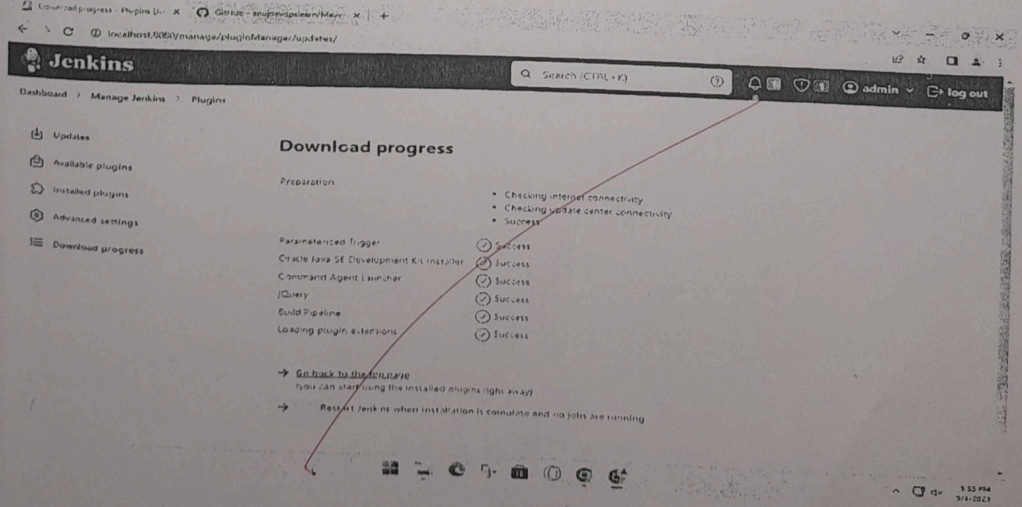
25) Go to status



26) Go to plugins



27) Install without restart

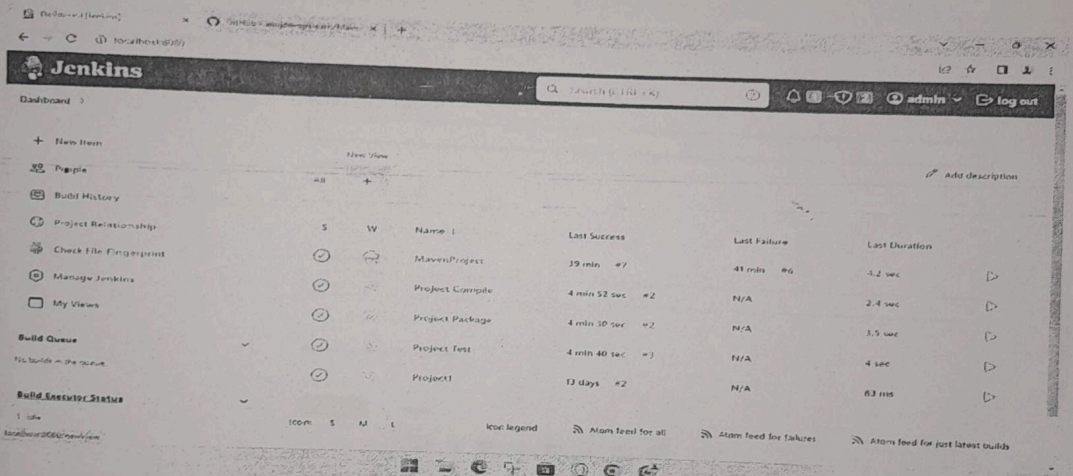


28) Jenkins is restarting

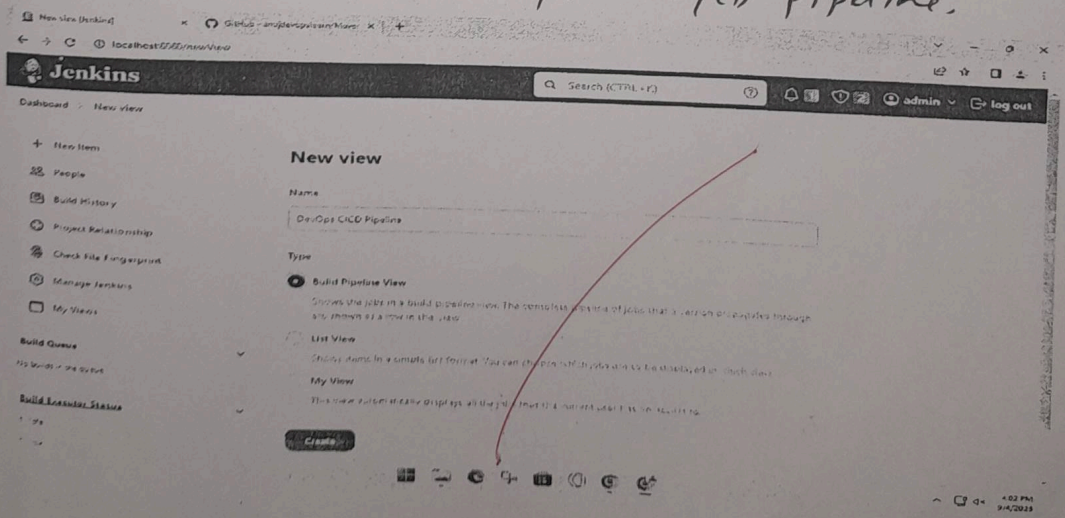
Please wait while Jenkins is restarting ..

Your browser will reload automatically when Jenkins is ready.

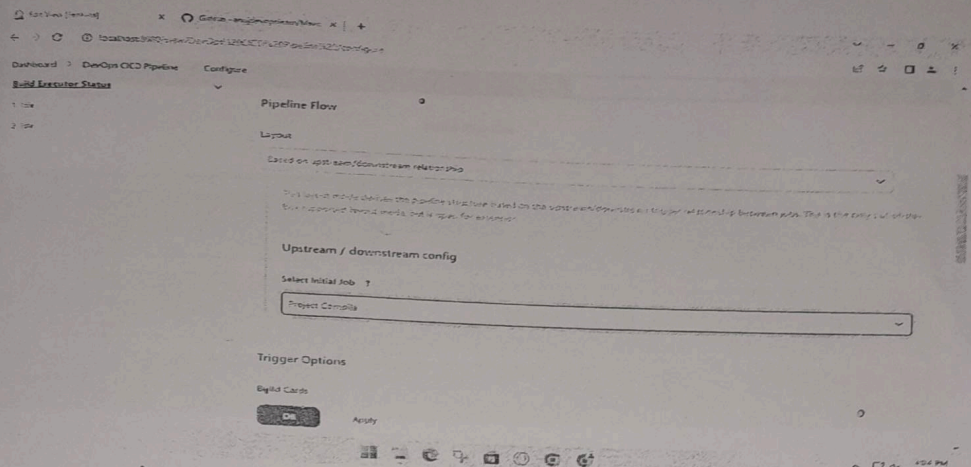
29) go to Dashboard



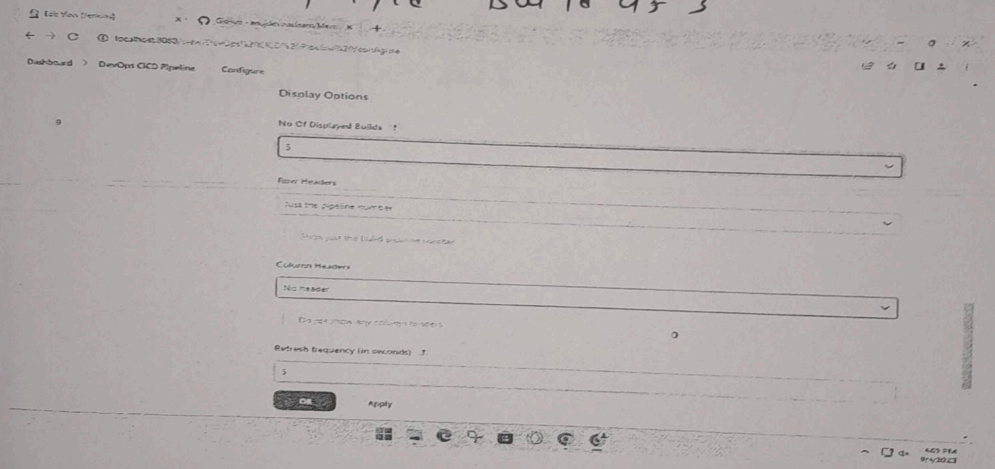
30) Name the view as Devops CI/CD pipeline.



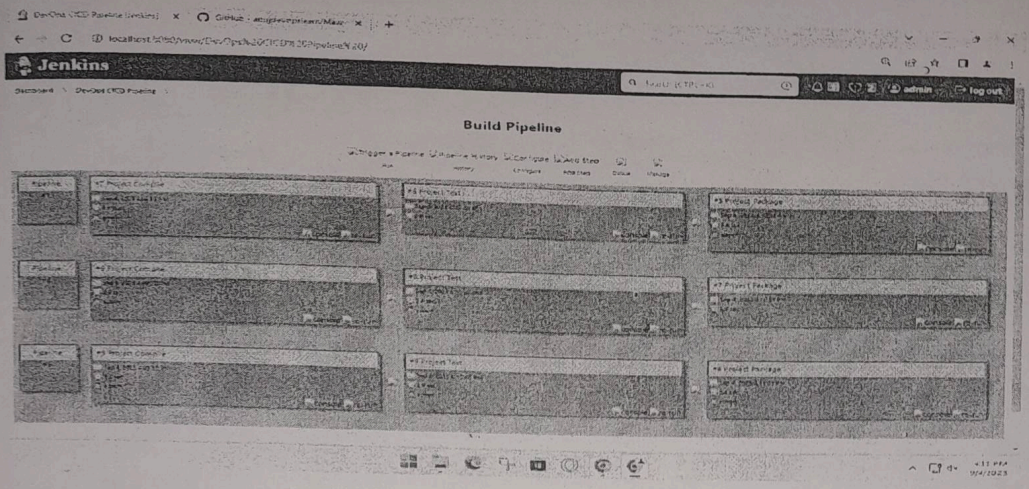
2) Go to configure & write project compile



3) Set No. of Displayed Build as 3



33) pipeline is Built.



conclusion: Hence we have successfully built a pipeline to test and deploy application.