Semester:V

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Academic Year: 2025-26

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Class / Branch: TE IT B

Subject: Advanced Devops Lab (ADL)

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EXPERIMENTNO.8

Aim: To create a Jenkins CICD Pipeline with SonarQube / GitLab Integration to perform a static analysisofthecodetodetectbugs,codesmells,andsecurityvulnerabilitiesonasampleWeb/Java / Pythonapplication
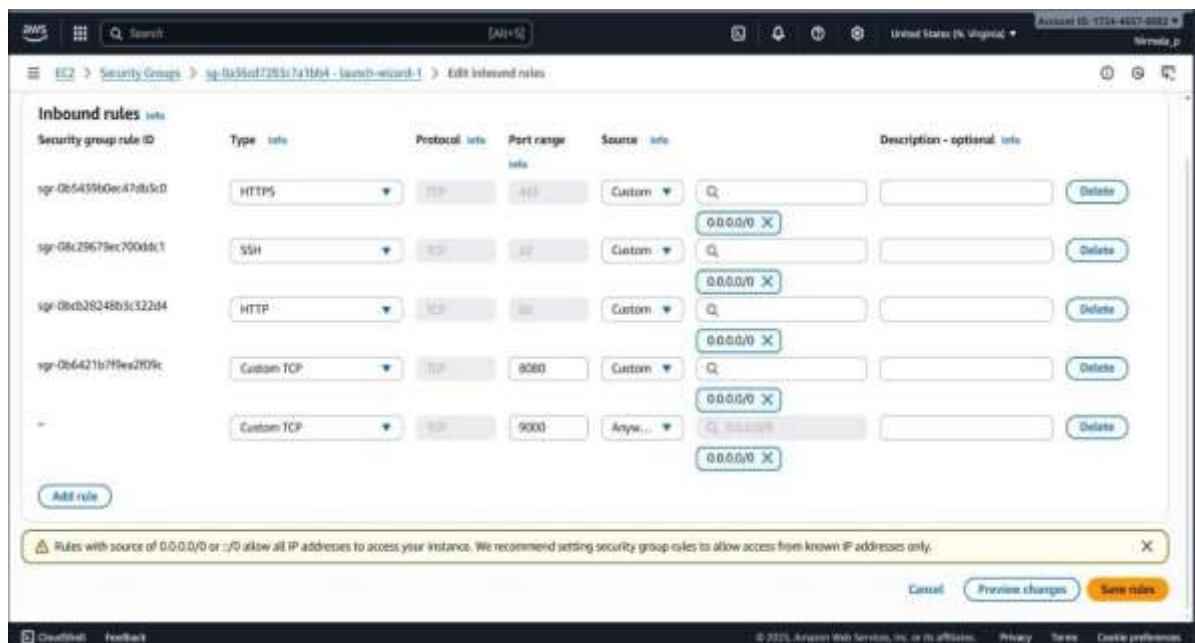
Step1:GotoJenkinsDashboard->manageJenkins ->AvailablePlugins ->InstallPlugin
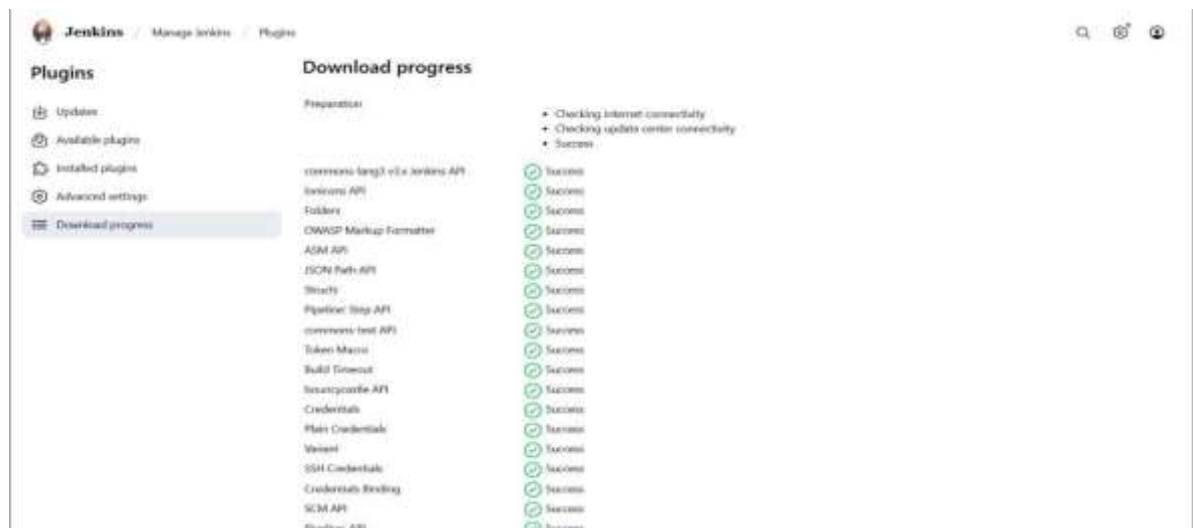
**Step2:Go**tojenkinsdashboard->managejenkins->systemconfiguration->tools-> Sonarqube scanner -> save
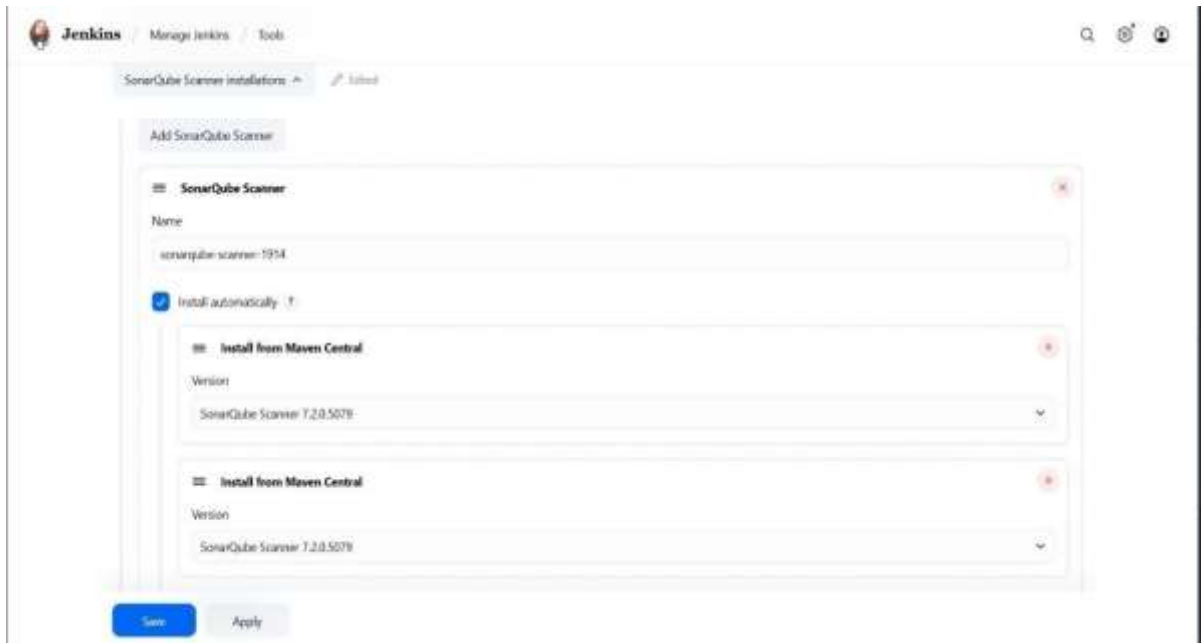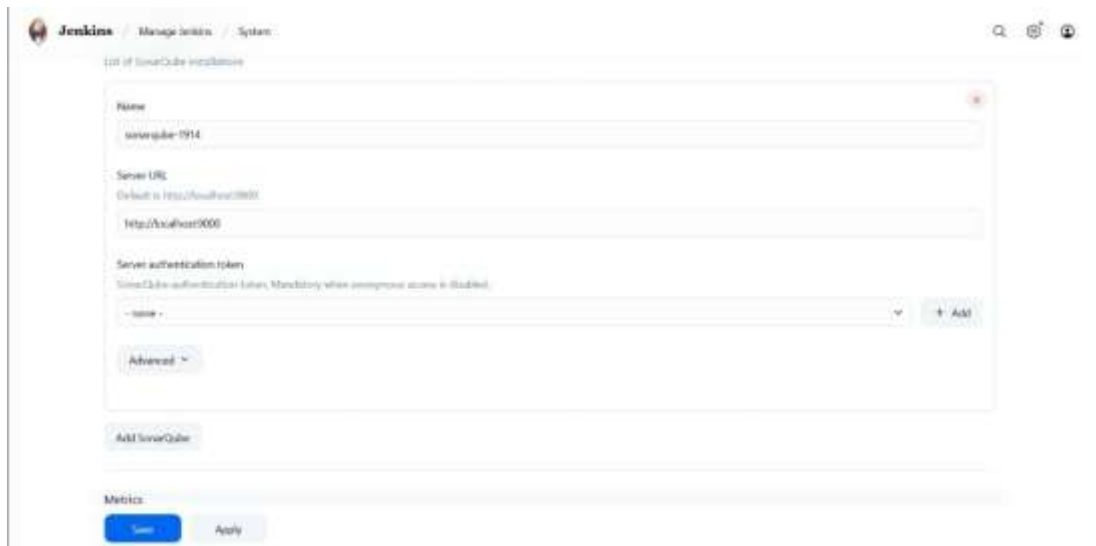

Step3:Editinboundrules->addport9000

Step4:Gotobrowser ->http://localhost:9000
- [ ] typeusernameandpaswordas'admin'
- [ ] Setnewpassword

Step5:ThedashboardofSonarqubewilllooksomethinglikethis.

Step6:Gototheadministrationtabandthengenerateatokenwhichwillbevaliduntil30days.
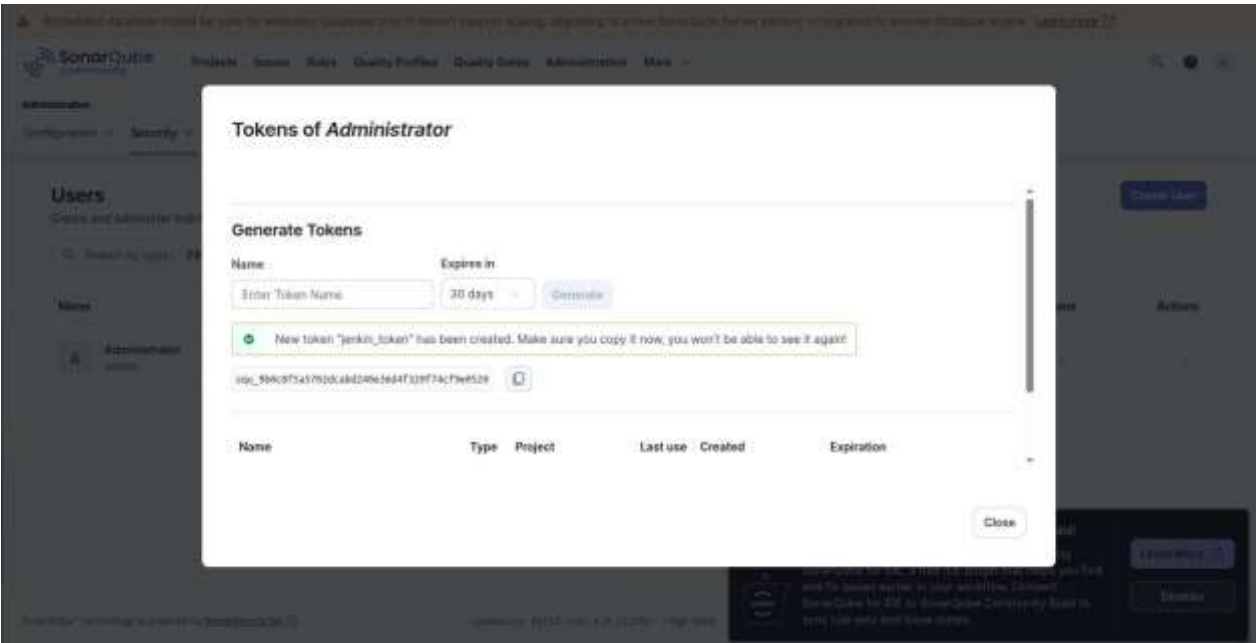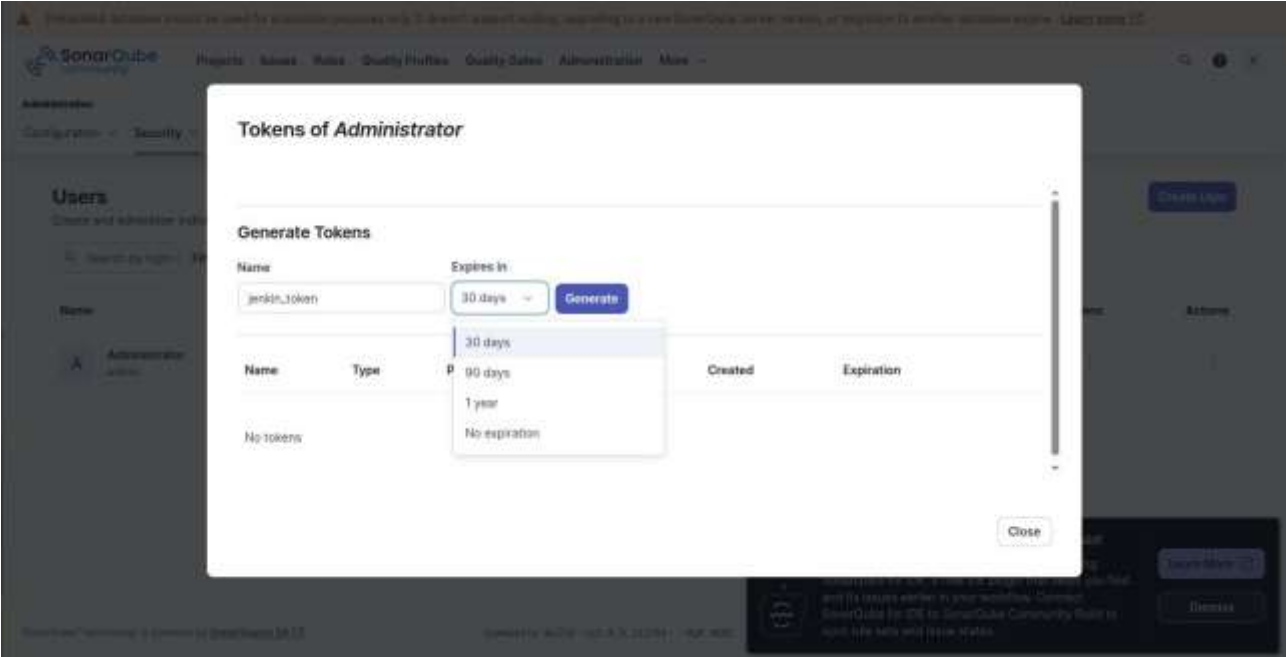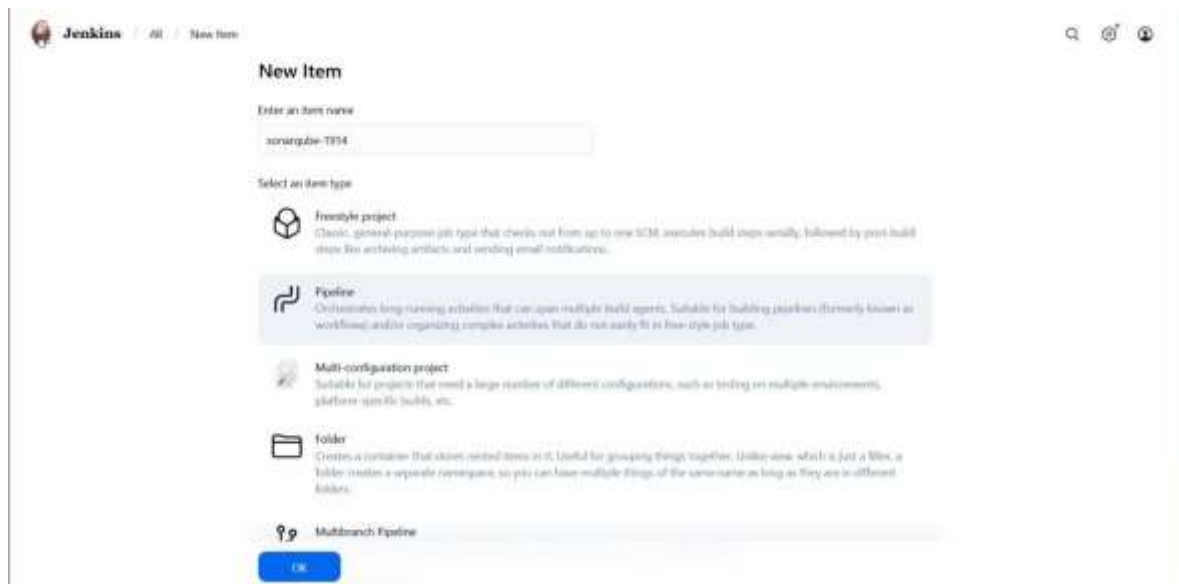
Step7:Changesystemconfigurationinjenkins Add
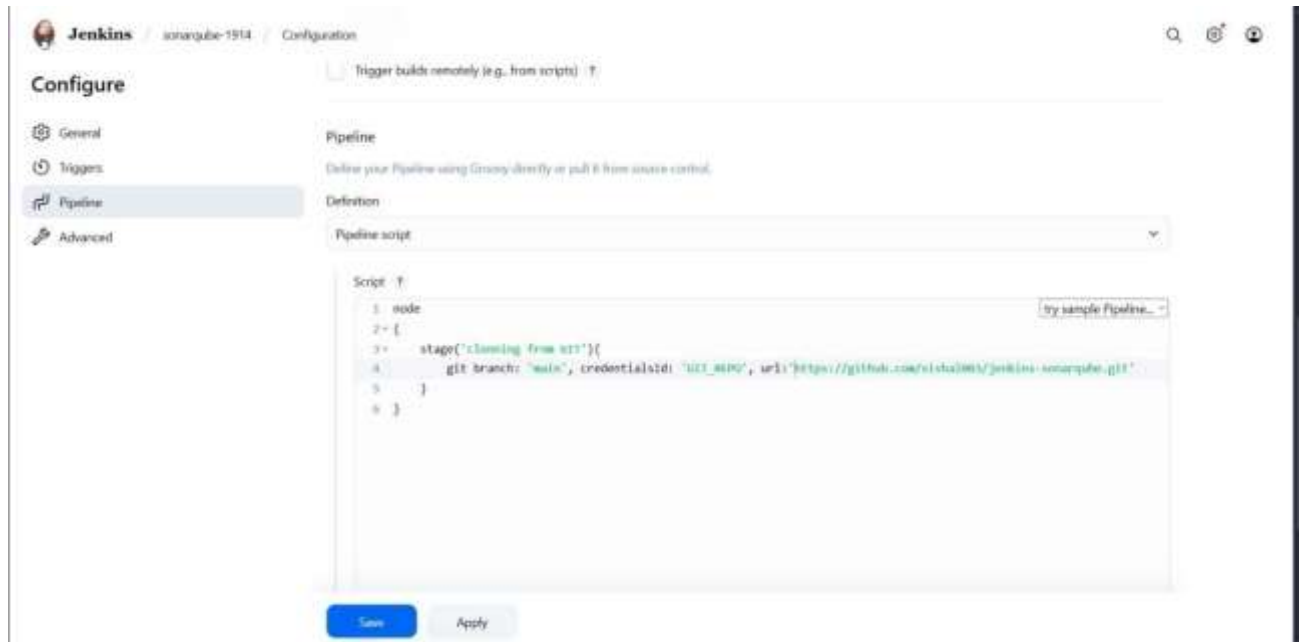server url ->'http://localhost://9000'

Step8:GotojenkinsDashboard->newitem->selectpipeline

Step9: Add the script in the pipeline.

Step10: Build the Project and check the console output.

Conclusion: In this experiment, I understood how SAST helps to find security issues in the source code before running the program. By connecting Jenkins with SonarQube, we can automatically check the code in the pipeline and fix problems early. This makes the code safer, better in quality, and reduces risks during development.