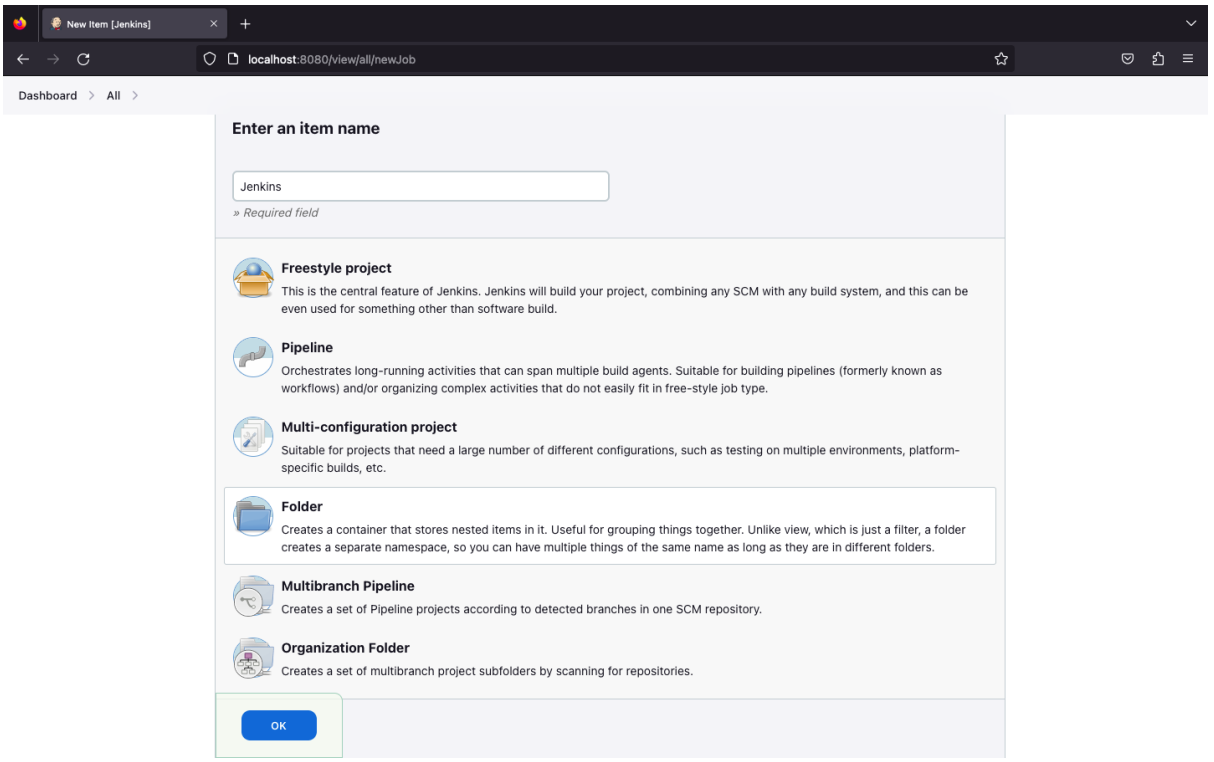
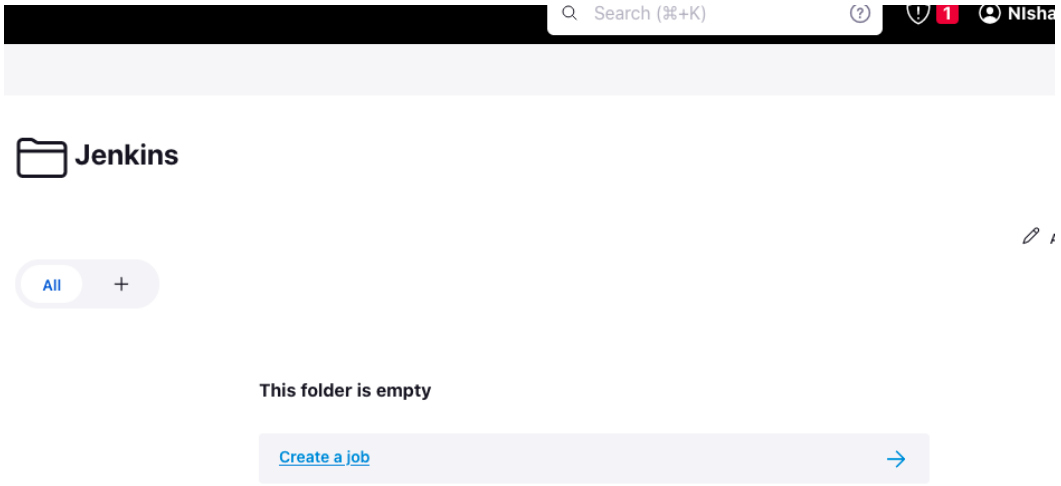
DevOps

1. **Create a Folder with the name Jenkins and create Job inside the folder execute a simple windows batch command to show JDK version in your system. Create a user with your name and assign only create, build, configure jobs permissions under the created Jenkins folder.**

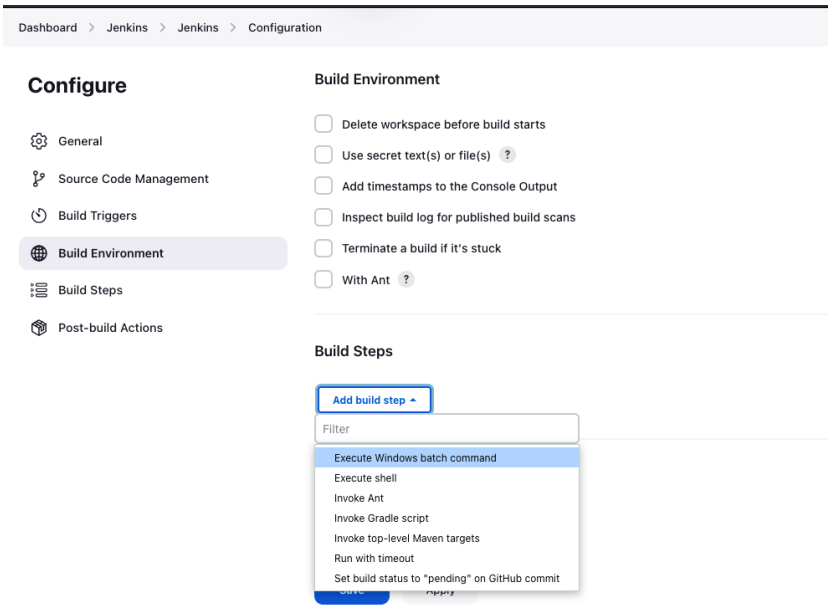
   a. Create a Folder named Jenkins

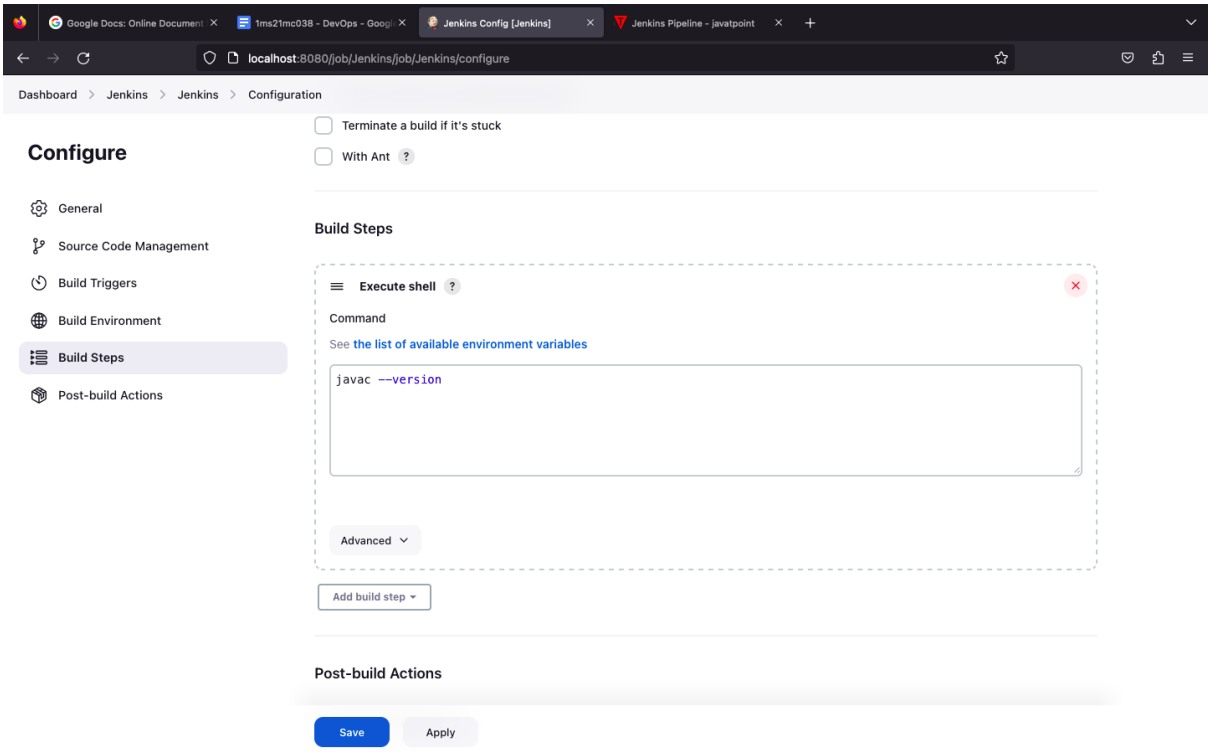


B. create a job inside jenkins folder

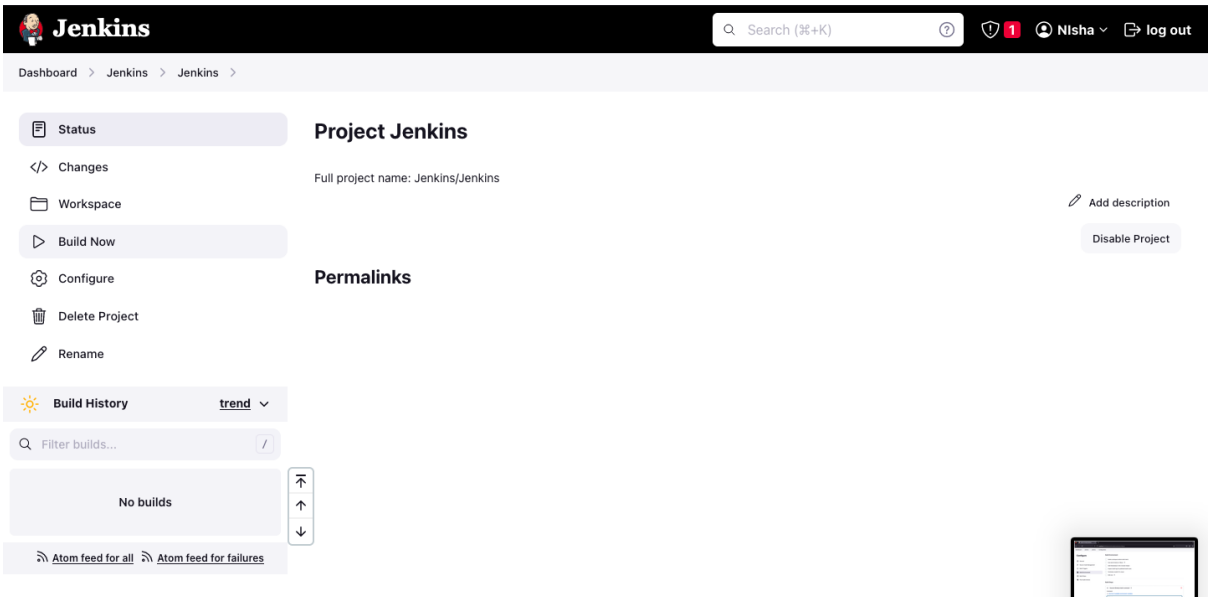


C. select the Build Step

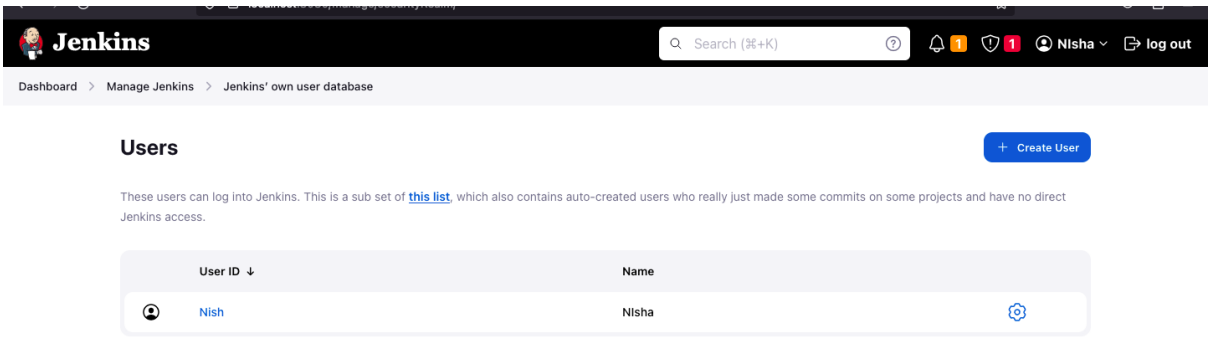


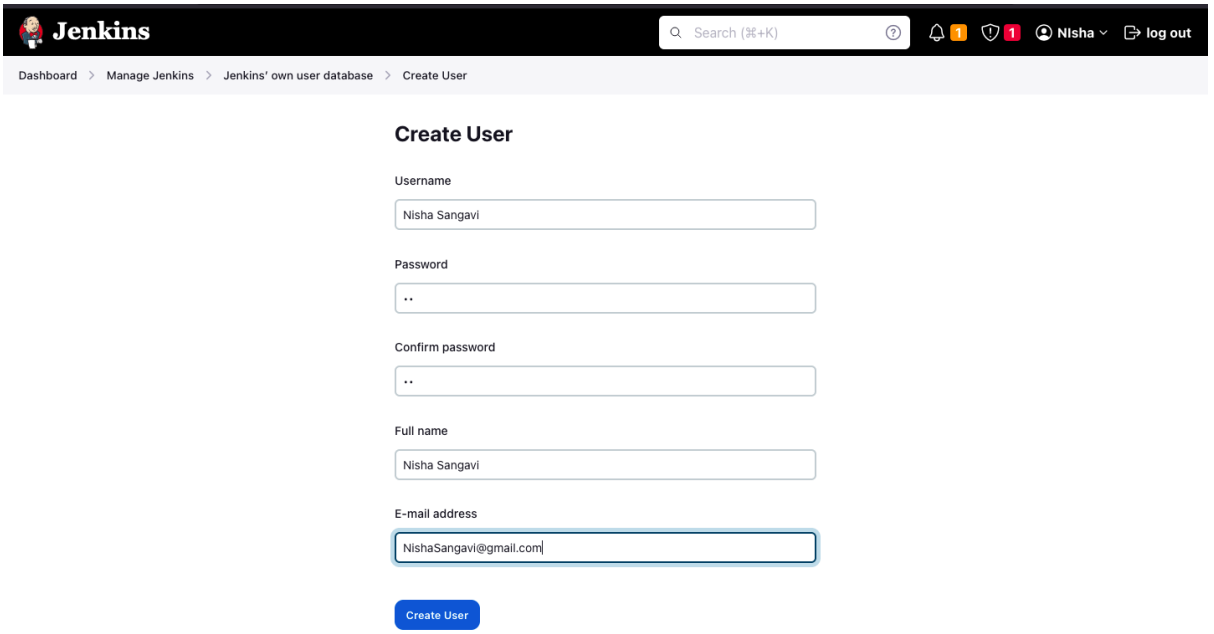


d. Build the project

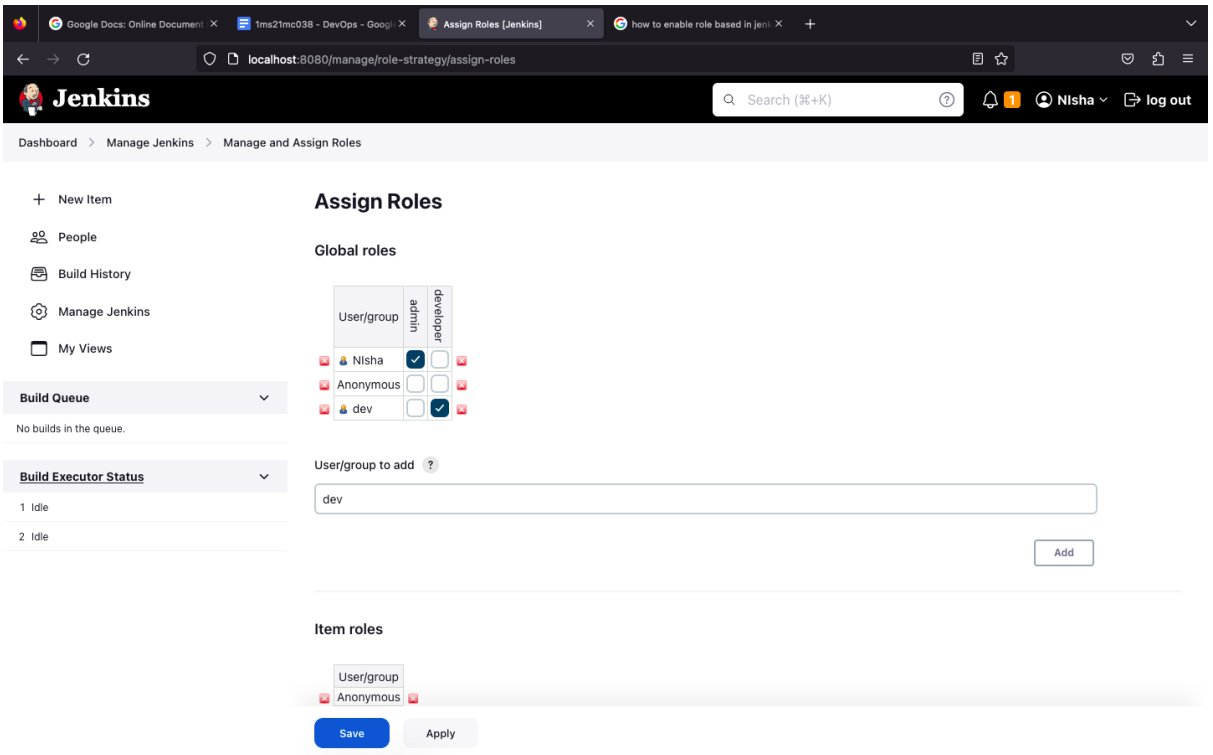


E. Create a User

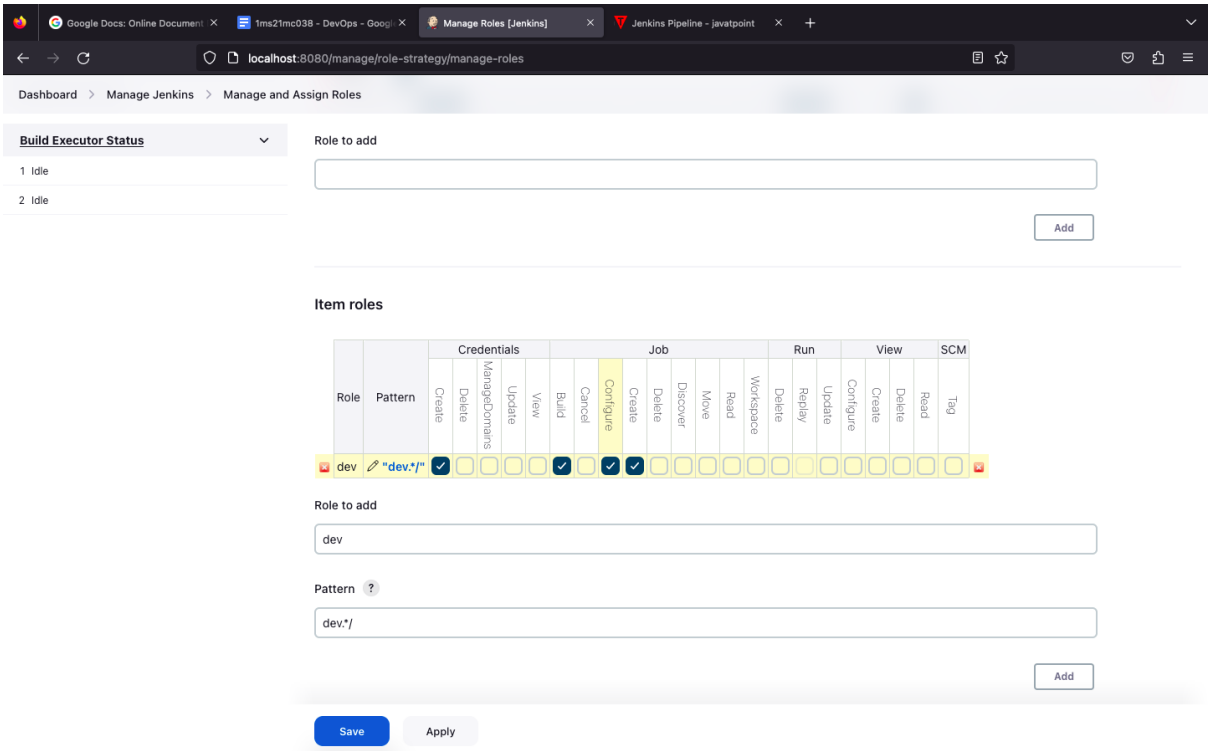




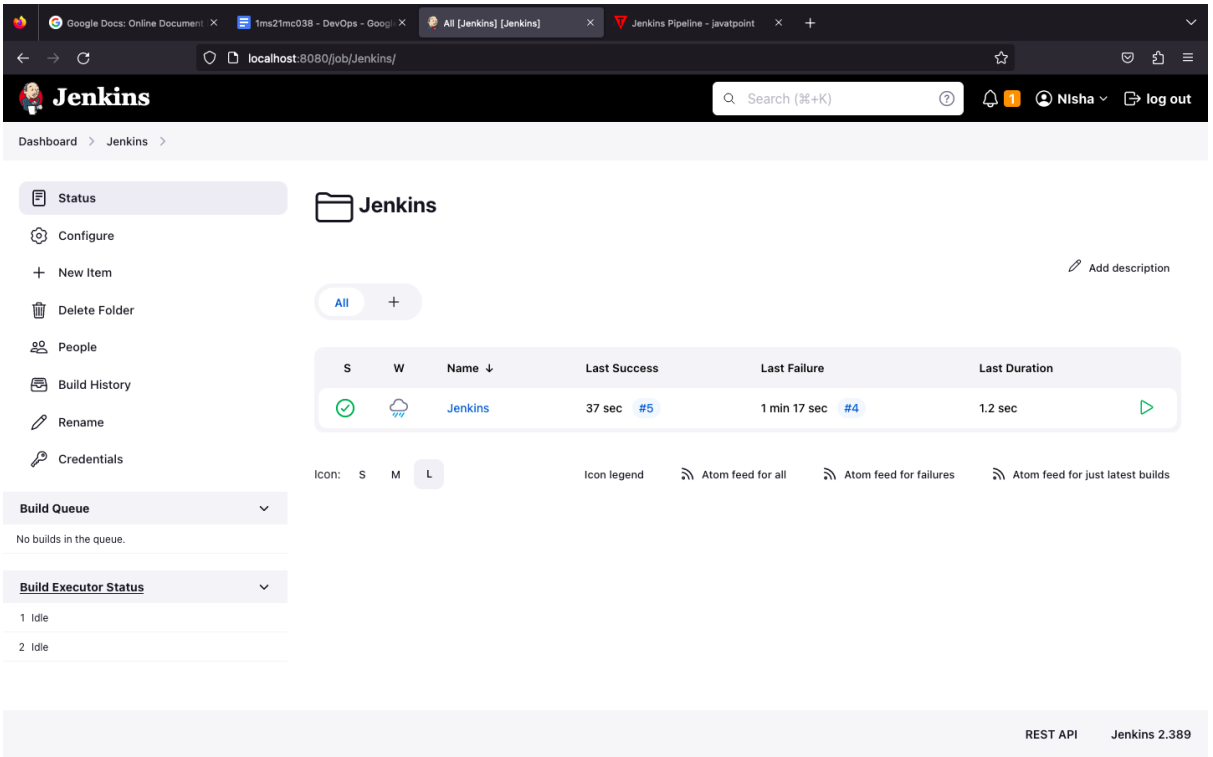
F. Assign roles



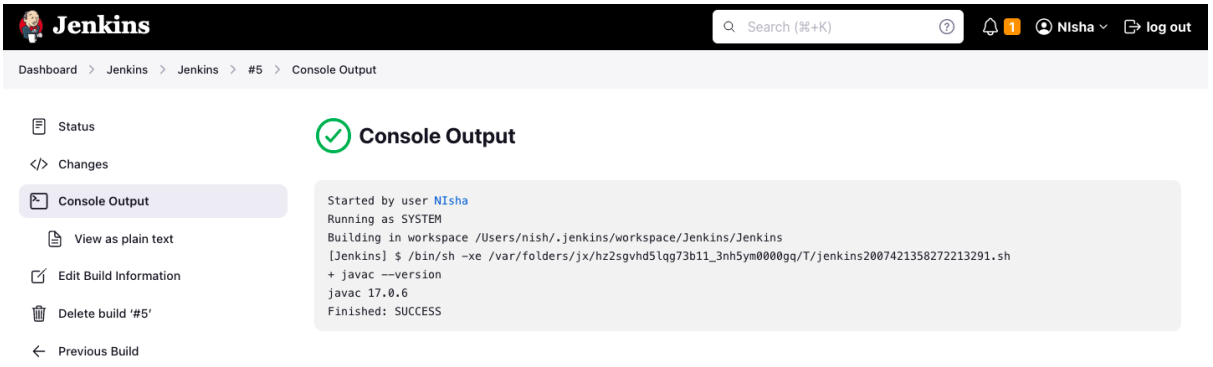
G. Assign item roles



H. Build the job

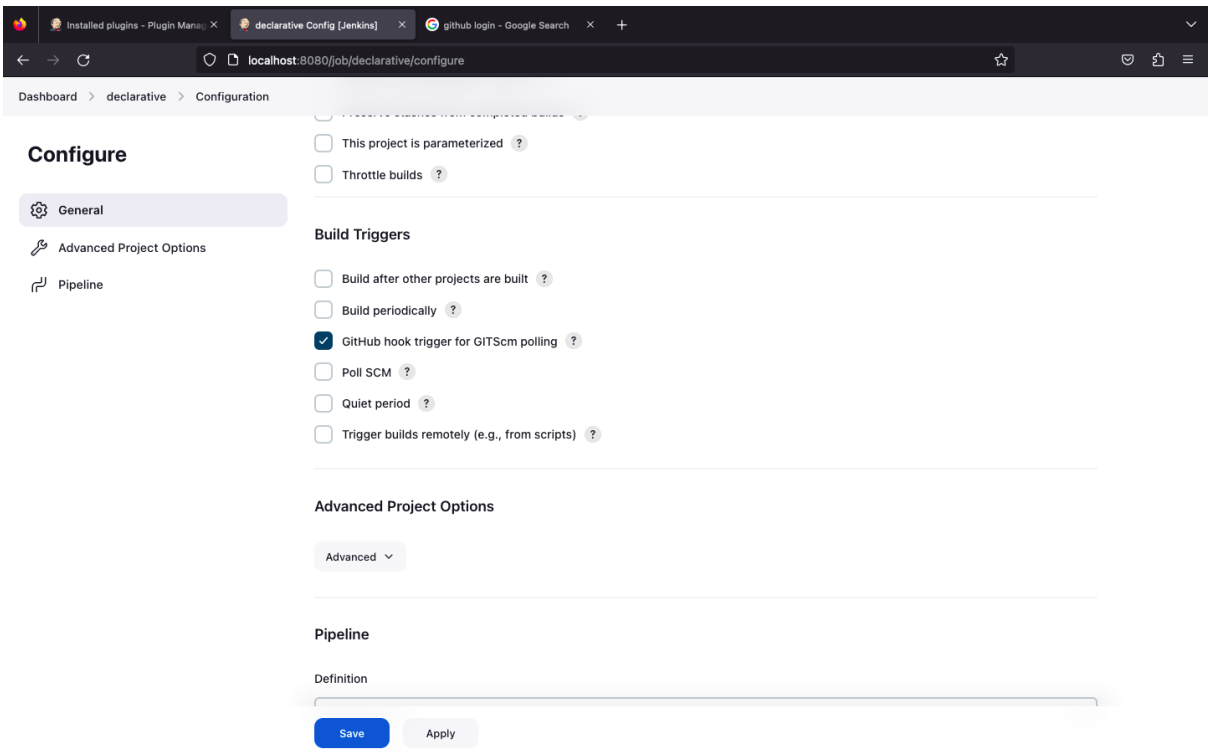


I . Console output

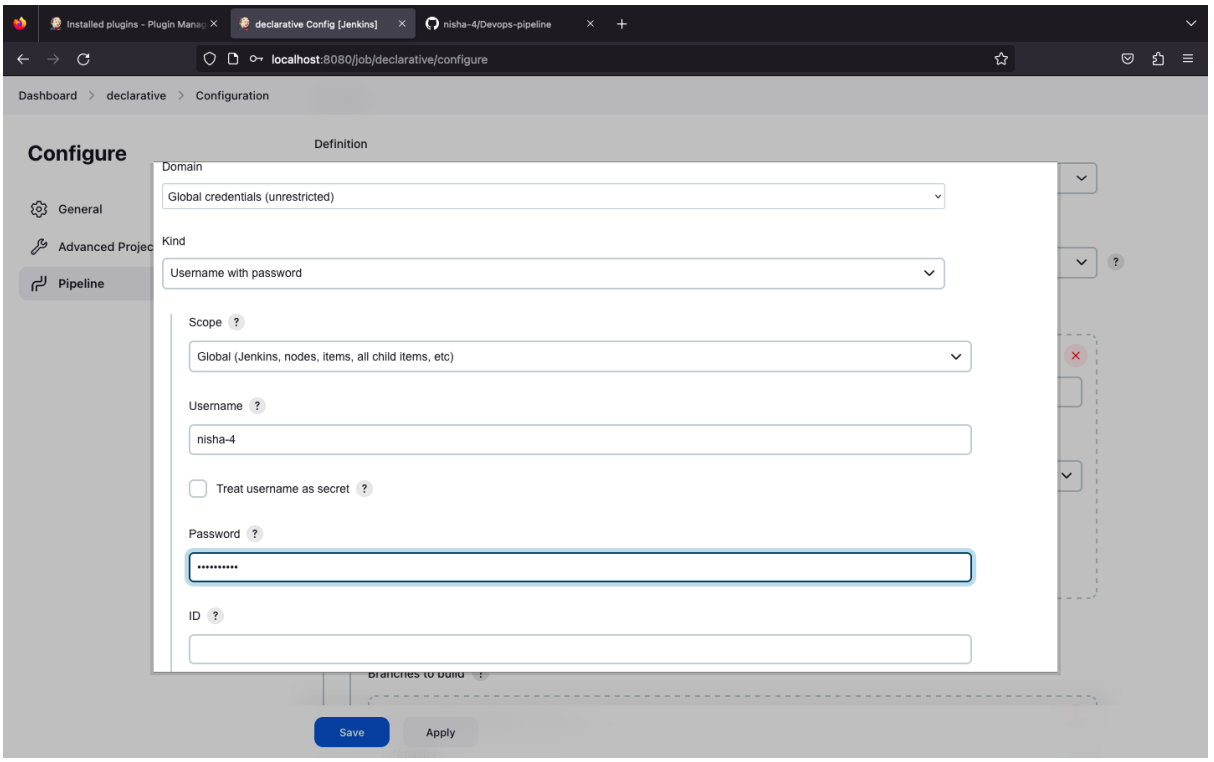


1c,2b. Integrate “Github webhook ” with Jenkins to identify the changes made in github.

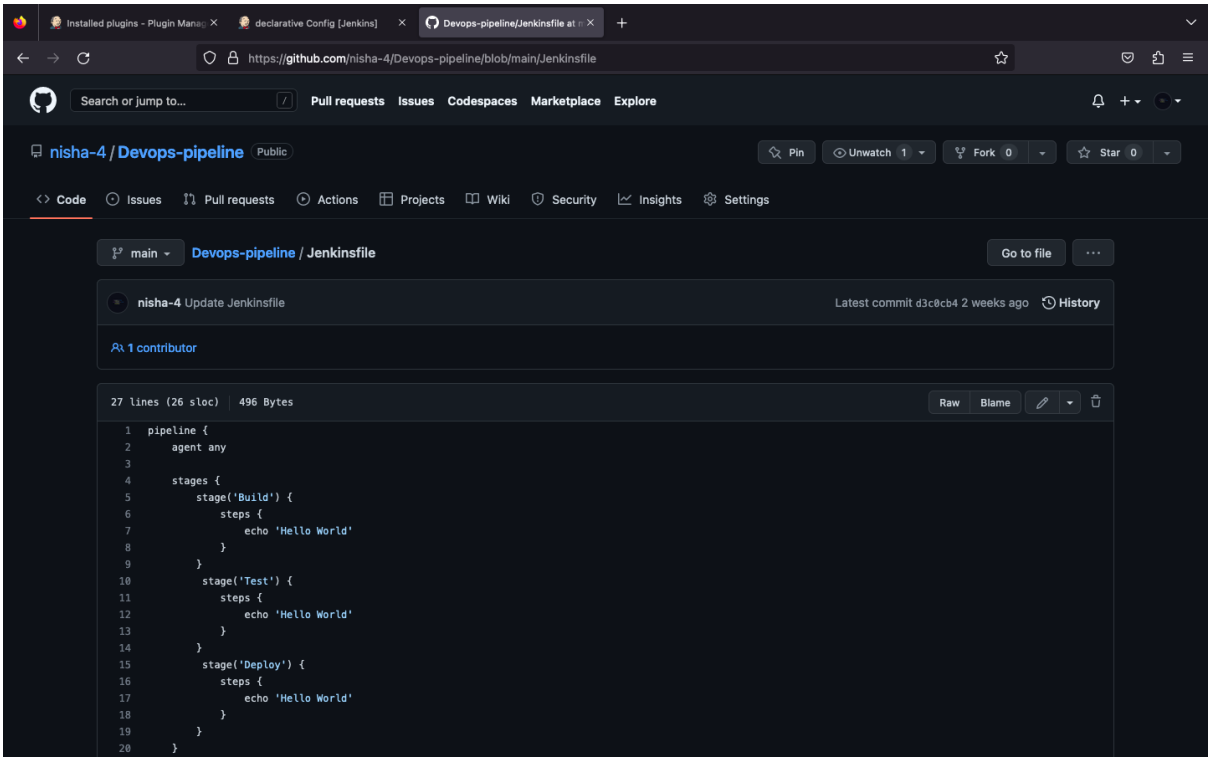
a.Create a pipeline and check for GitHub hook trigger for GITScm polling



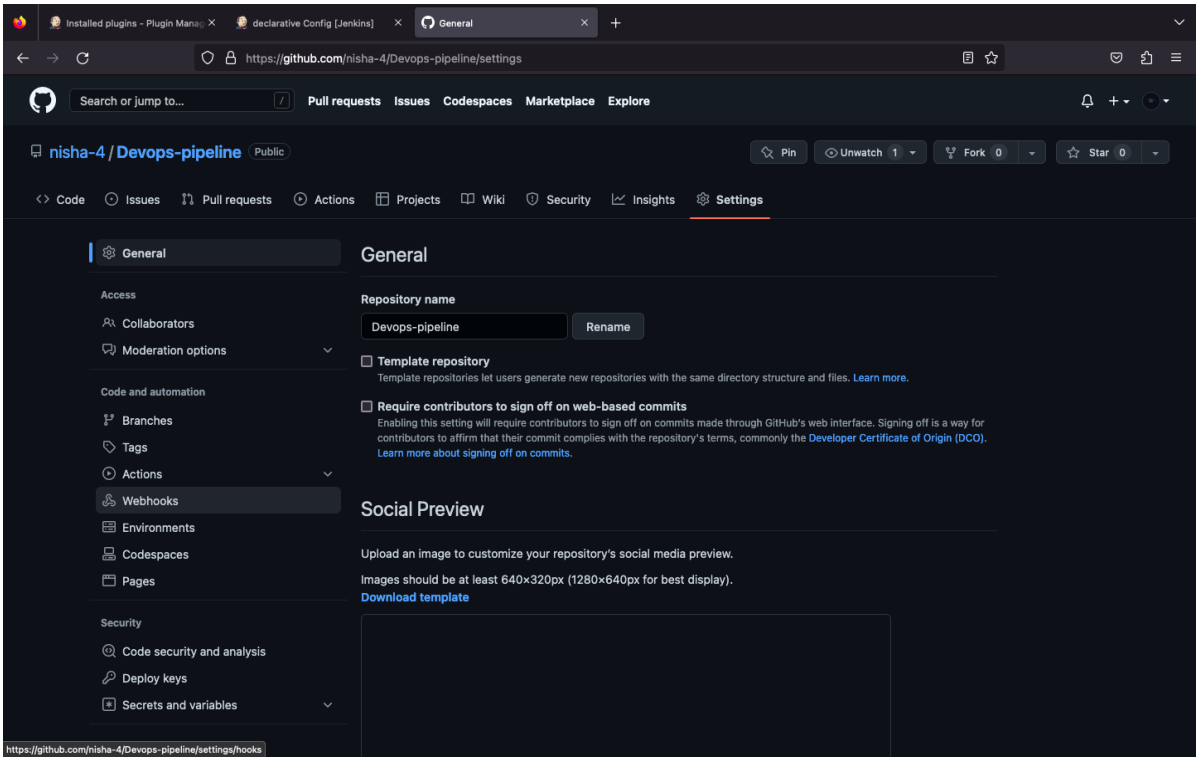
b. Add your credentials of Git



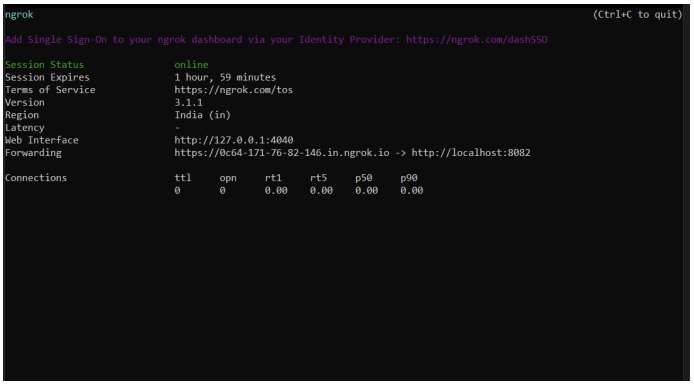
c. Copy the git repository link of Jenkinsfile



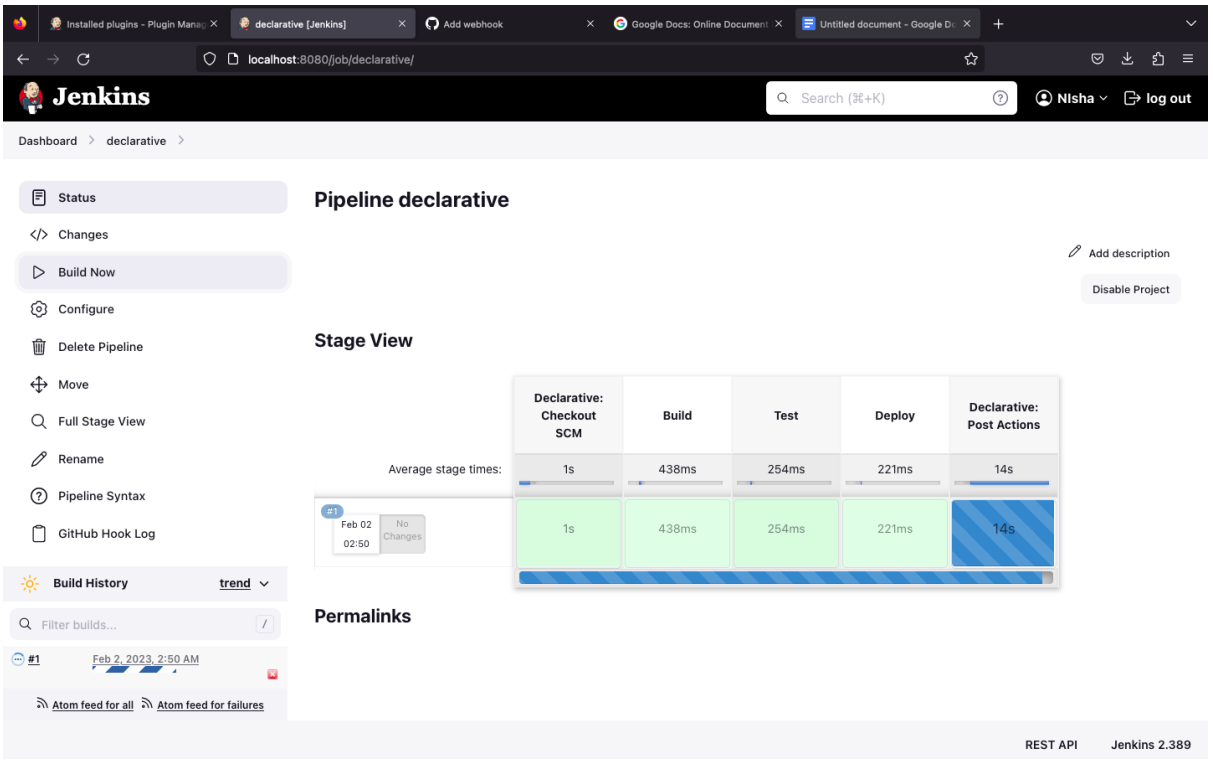
D. Select the webhook for the project



E. install ngrok and copy the forwarding link



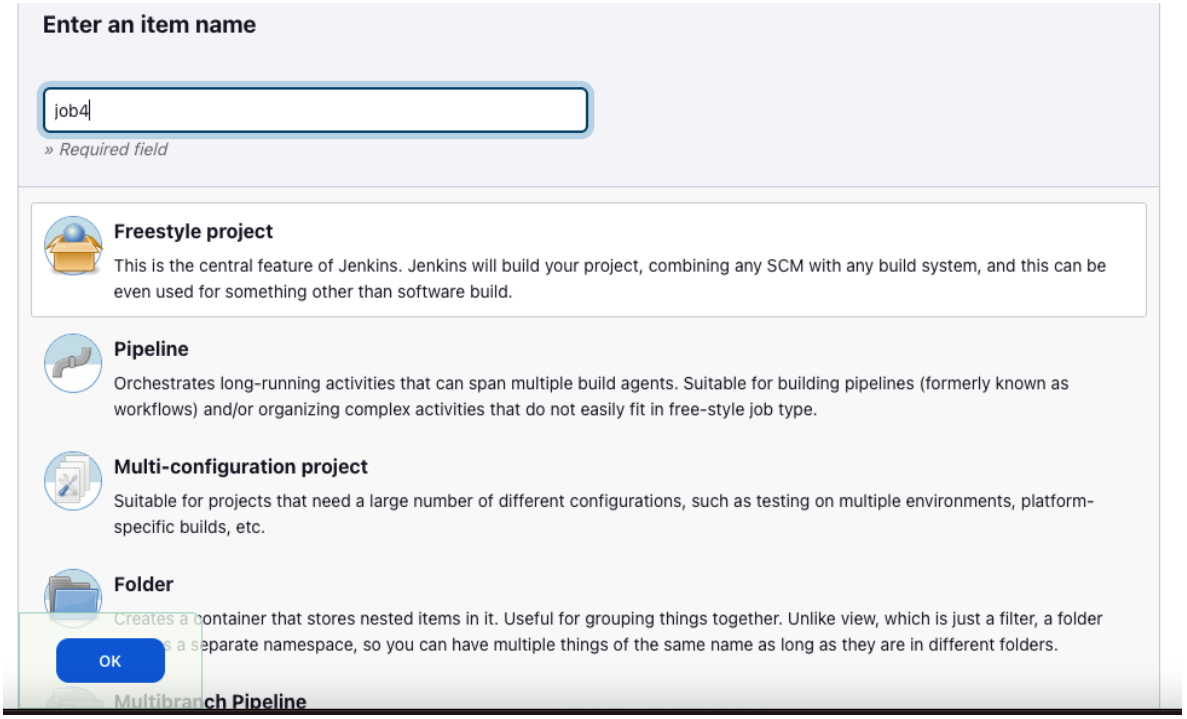
F. Declarative pipeline gets automatically built.



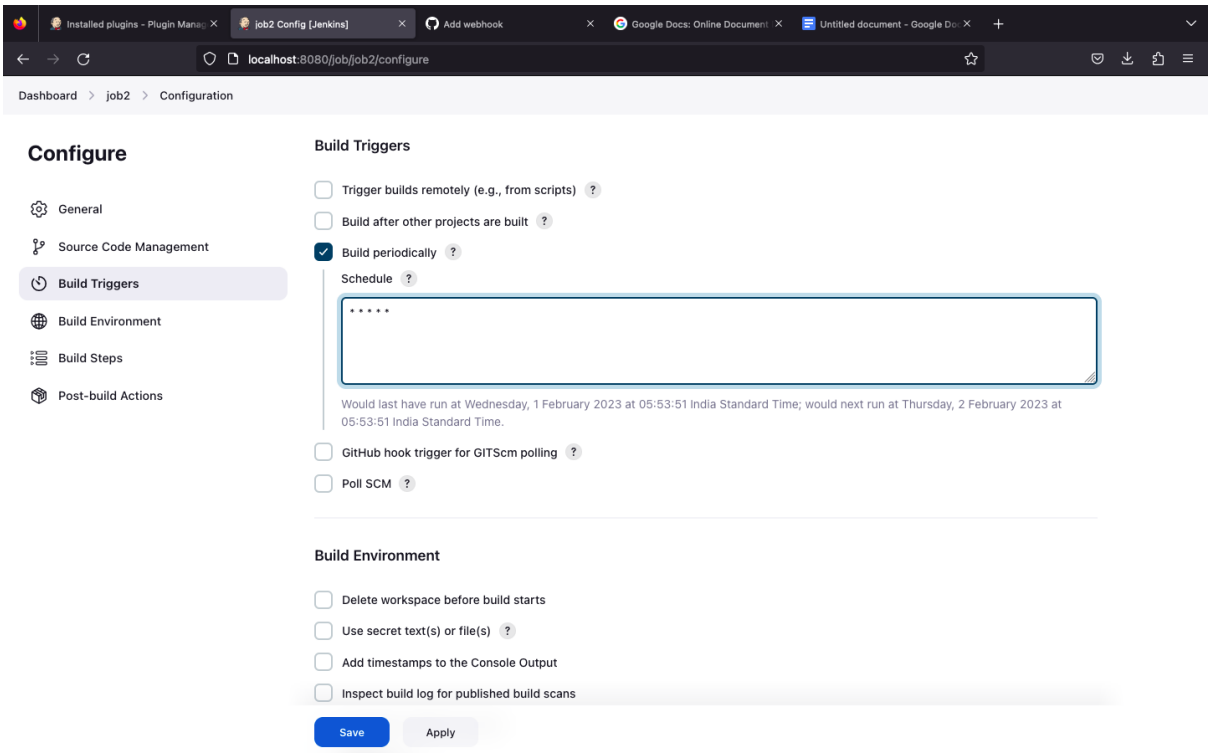
2c.How to run Jenkins job periodically using Jenkins scheduler? Trigger the build automatically with Jenkins scheduler. Write the scheduler pattern automatic triggering of jobs for the following

- Go to Build triggers and check the build periodically by giving the required schedule
- The project will run for the specified schedule automatically.

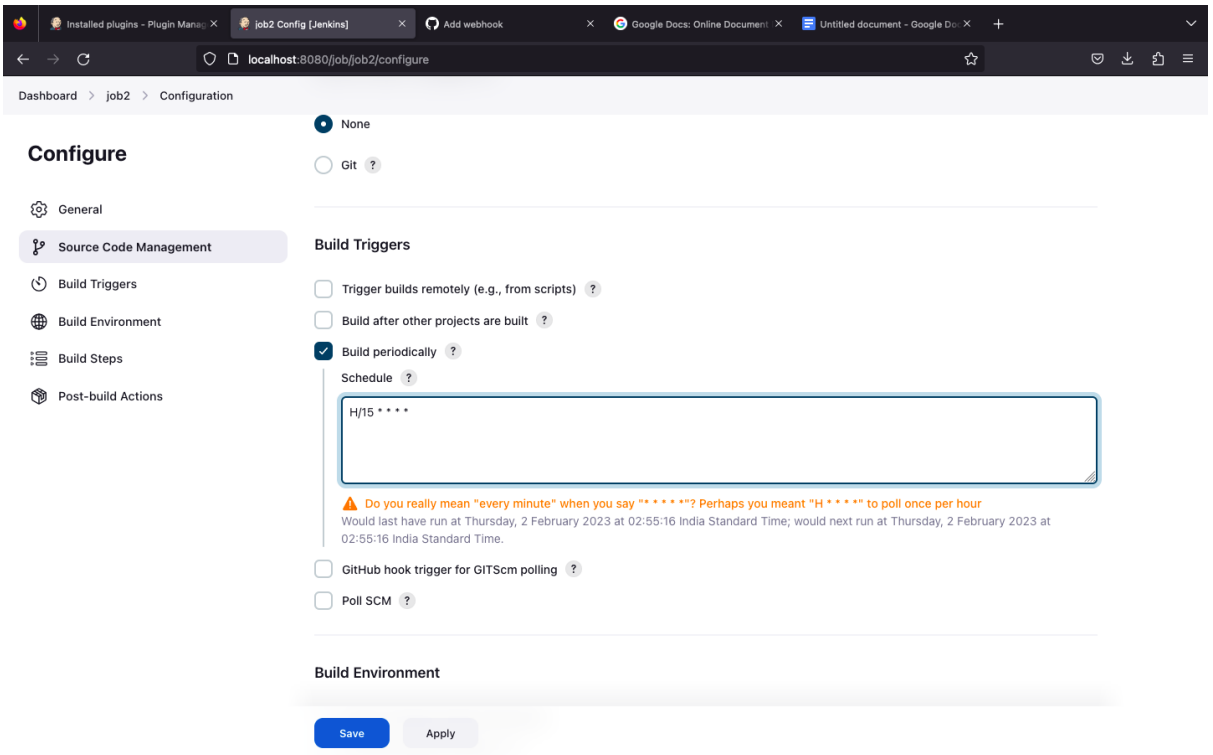
A . Create a job



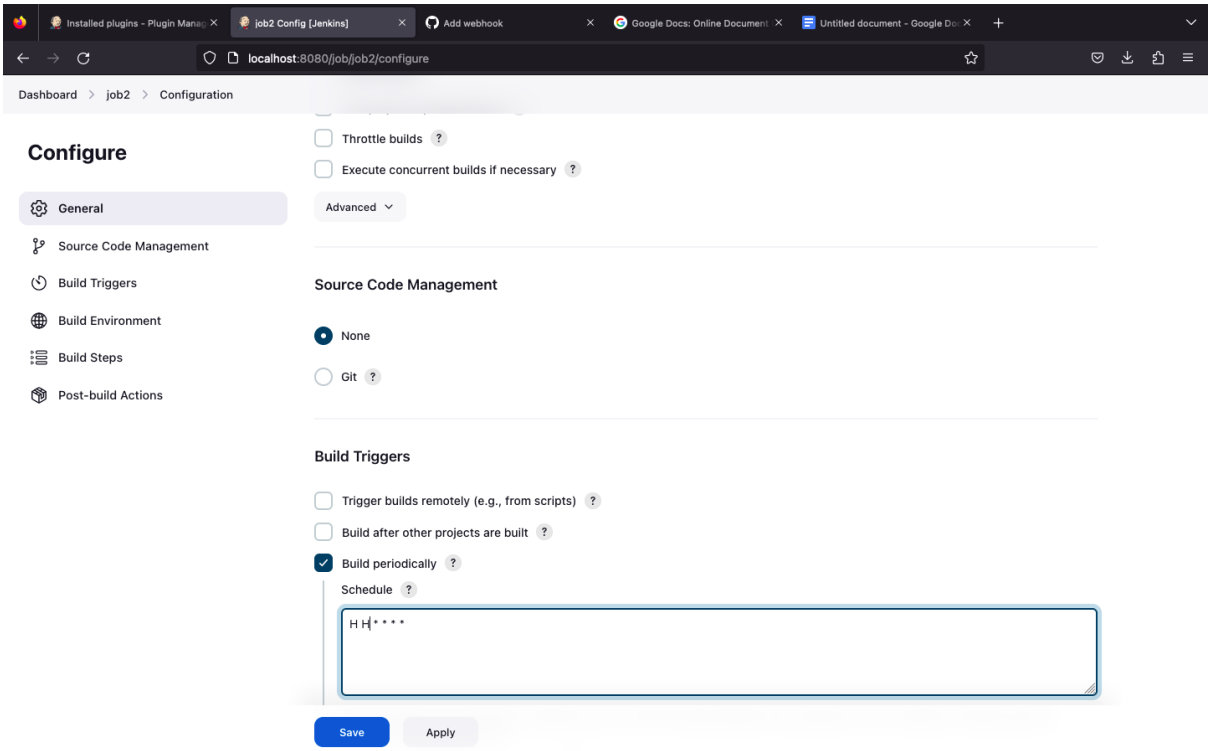
1. Run Every Minute



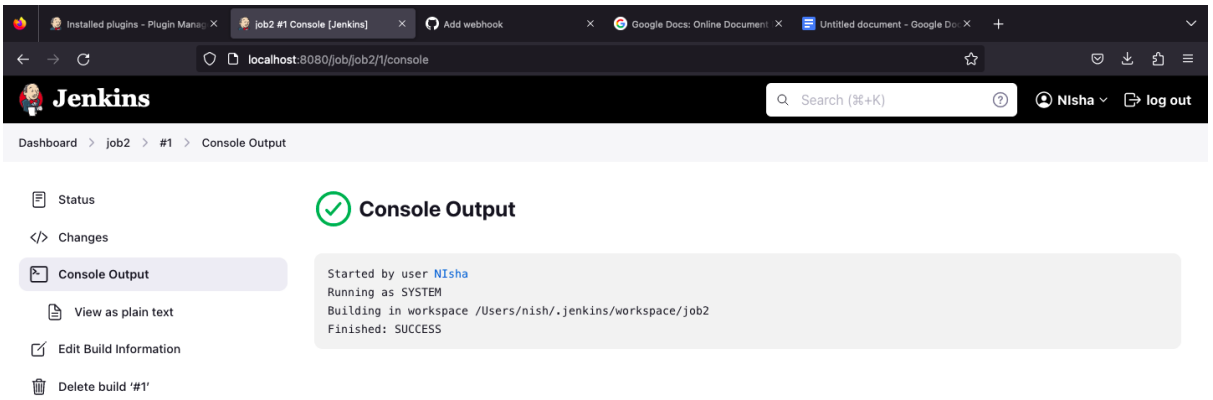
2. Run Every 15 minute



3. Run Every Hour Every Day

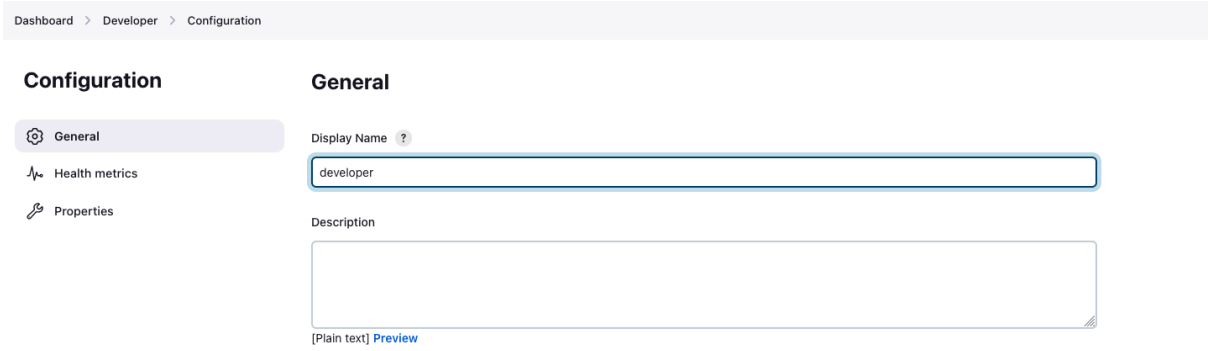


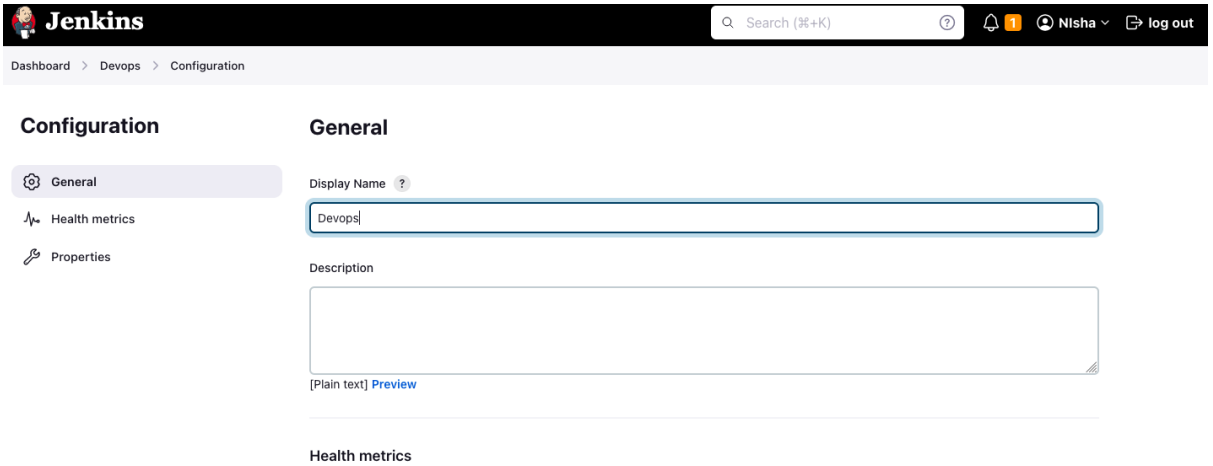
B. The build is successful

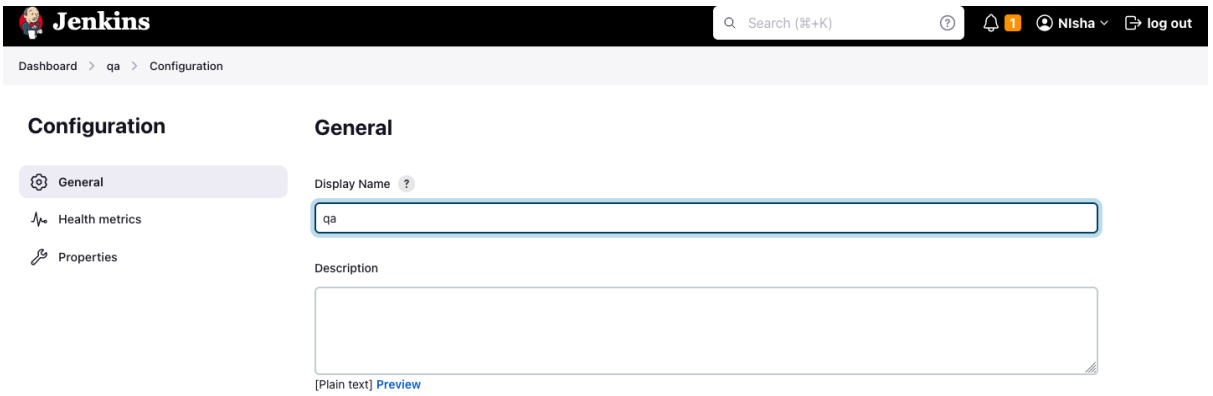


3b,5b . Create multiple users and Use role-based authorization strategy to Assign the permissions to the following roles
1. DevOps Engineer: should only create, build, configure, delete jobs under DevOps_Team folder.
2. Developer: should only build, configure, delete jobs under Developer_Team folder.
3. QA Tester: should only build, configure jobs under QA_Team folder. Verify the permissions.

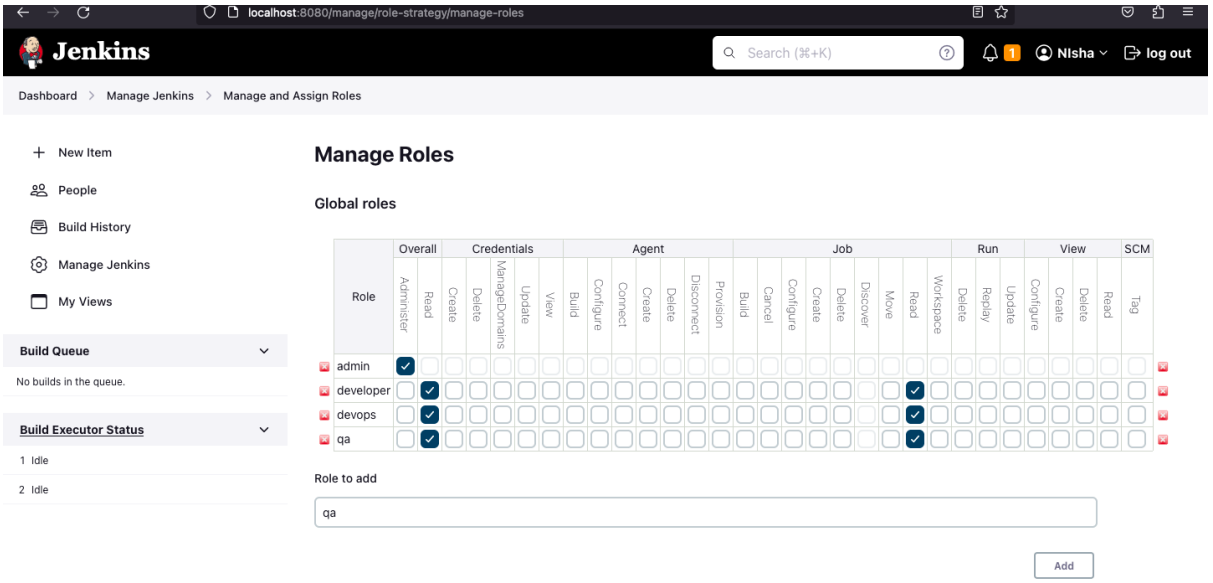
a. Create the required folders



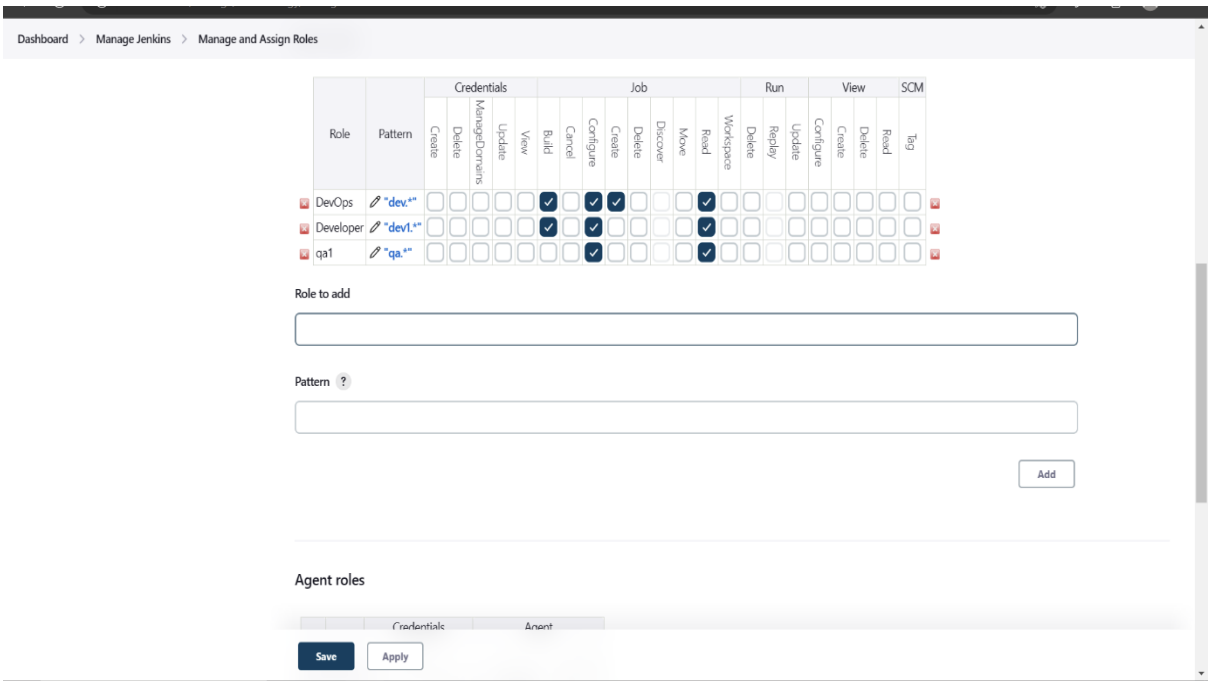




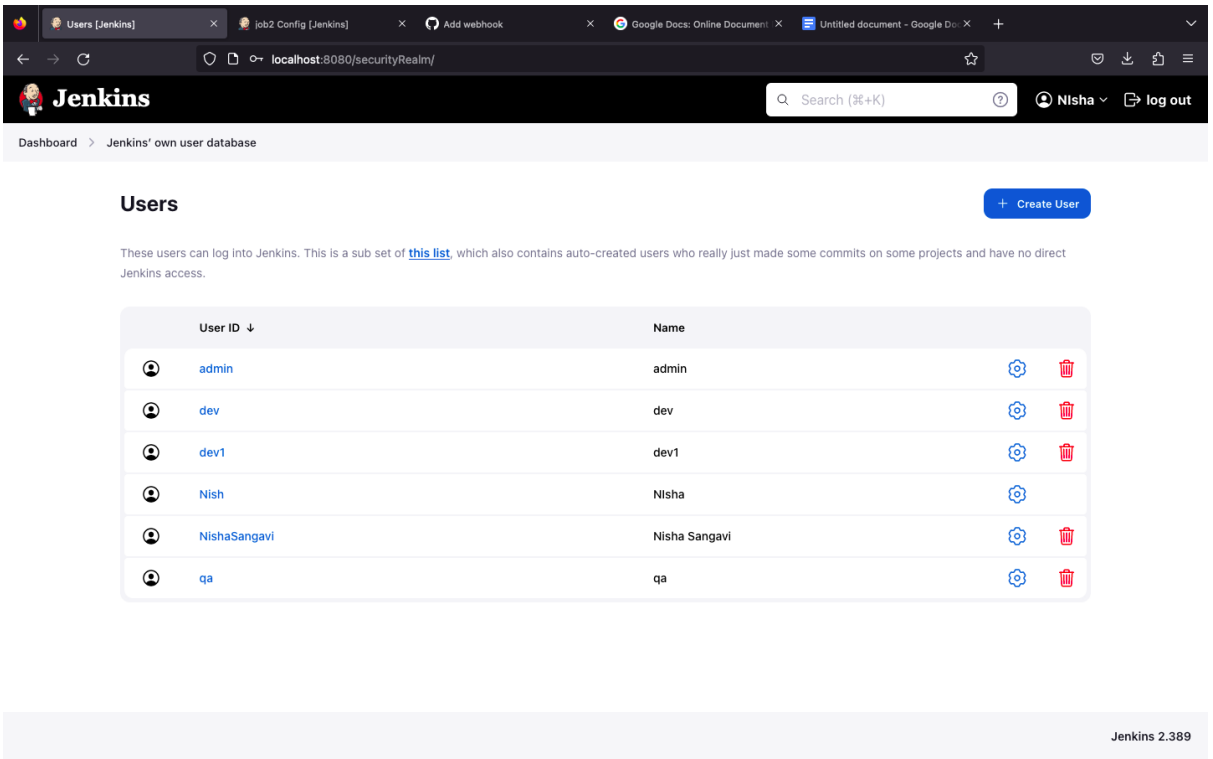
b. Create manage roles



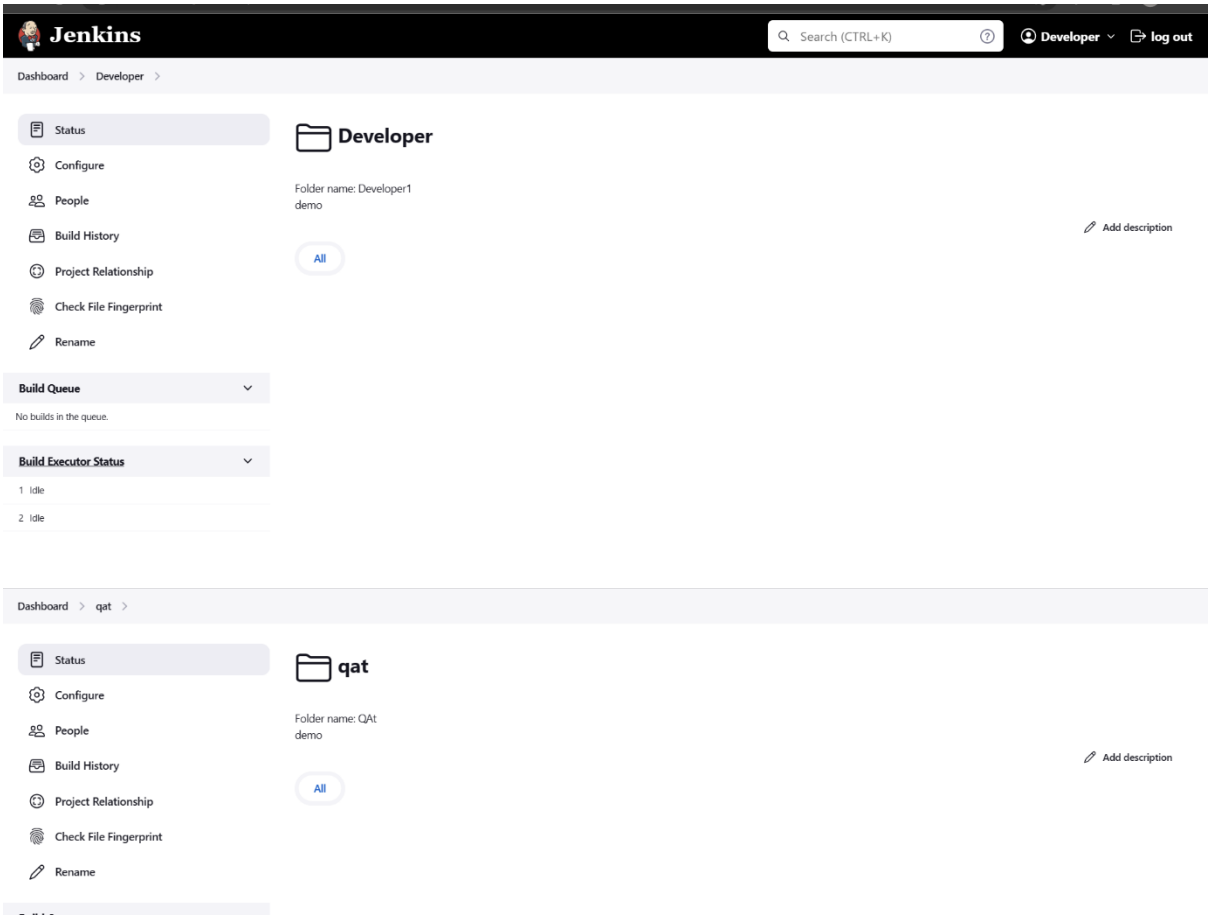
C . Assign roles



D. created users list

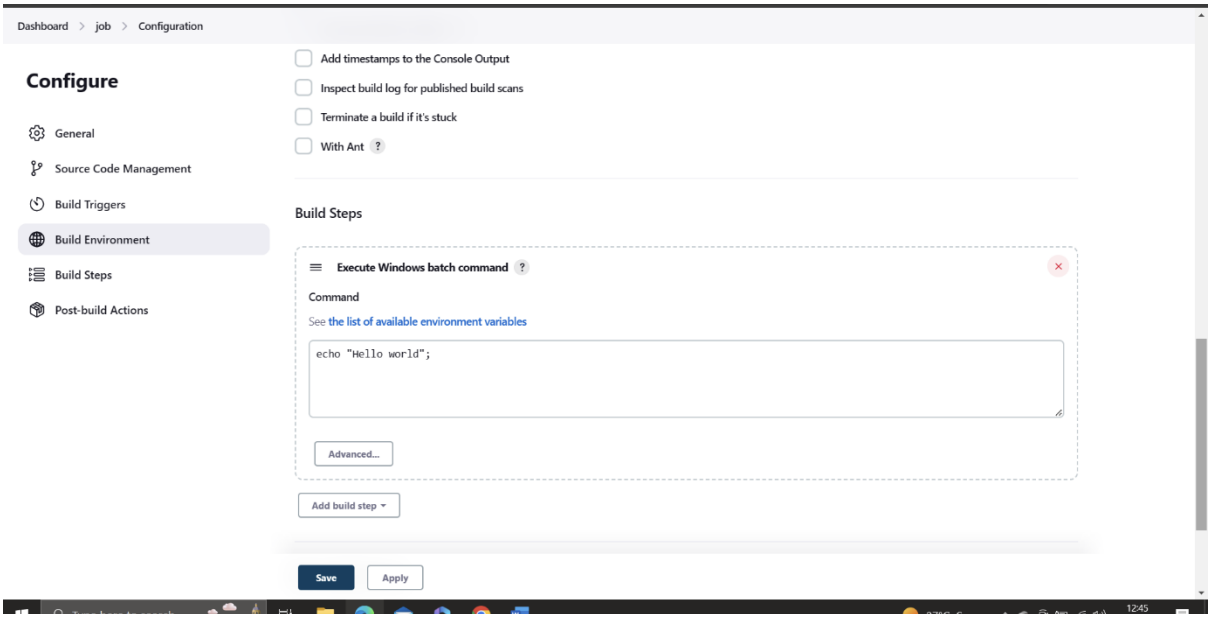


E. the final output

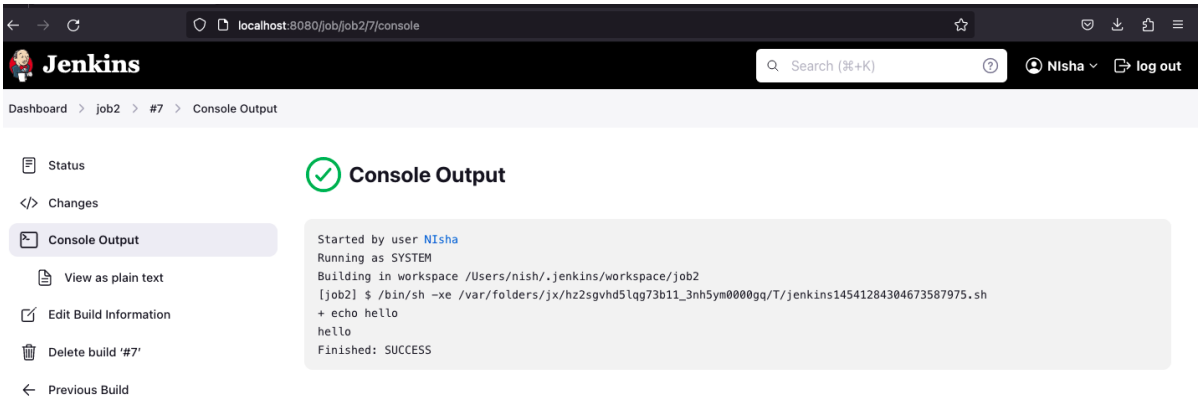


3c. Create a simple job to display simple hello world message using windows batch command. And demonstrate how to trigger Jenkins build automatically for the created job using scheduler. Implement Poll SCM as per scheduler.

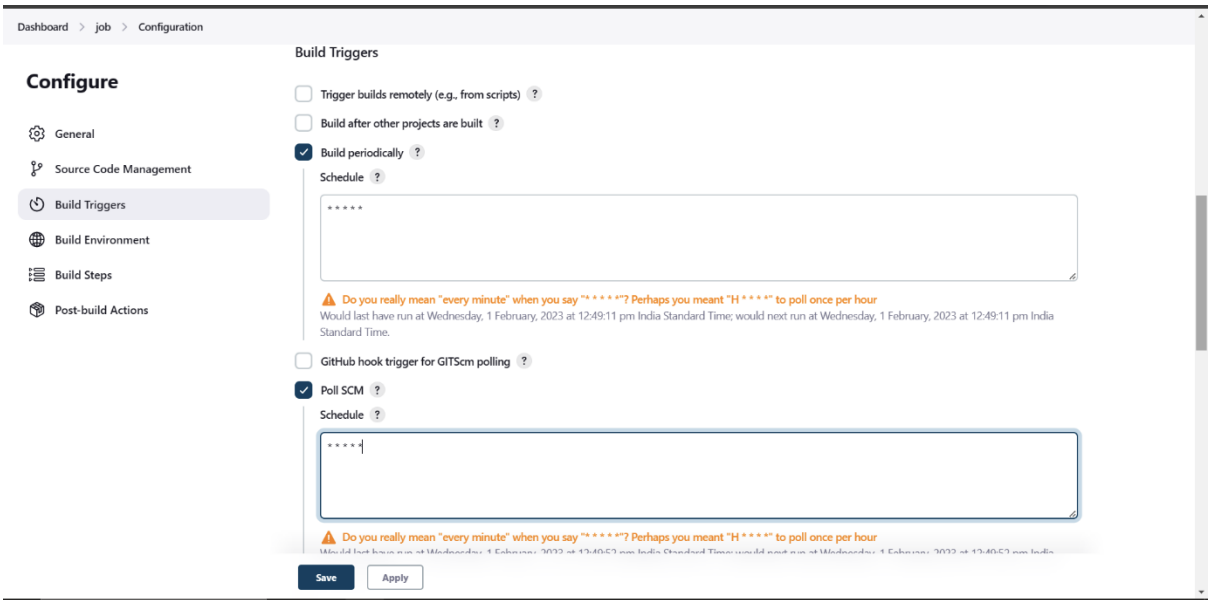
a. Create a job

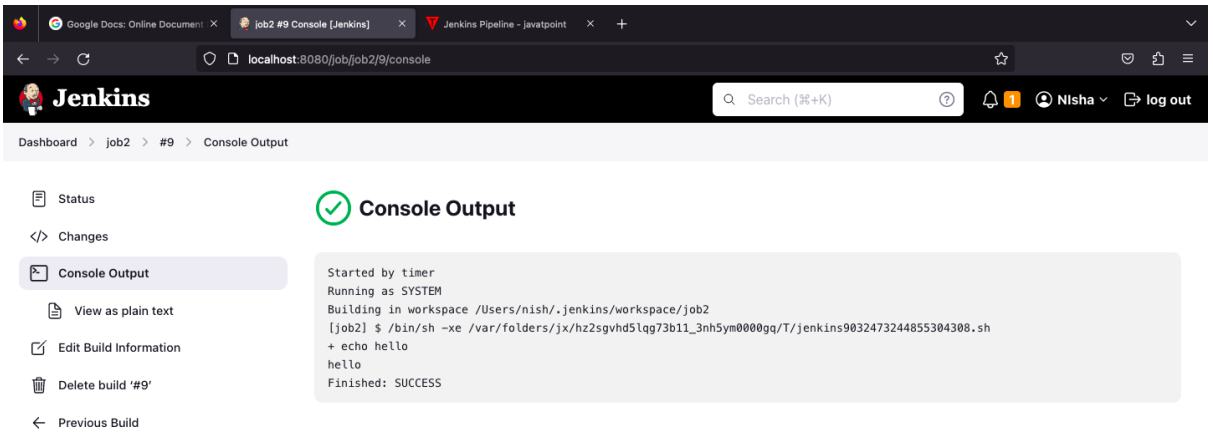


b. Console output



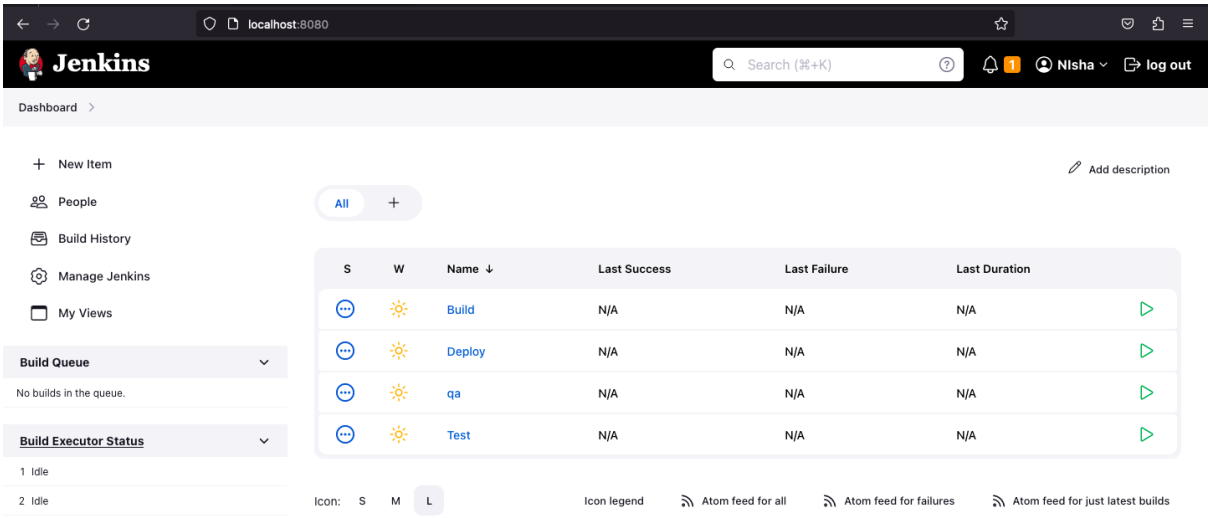
c. Enter the build schedule



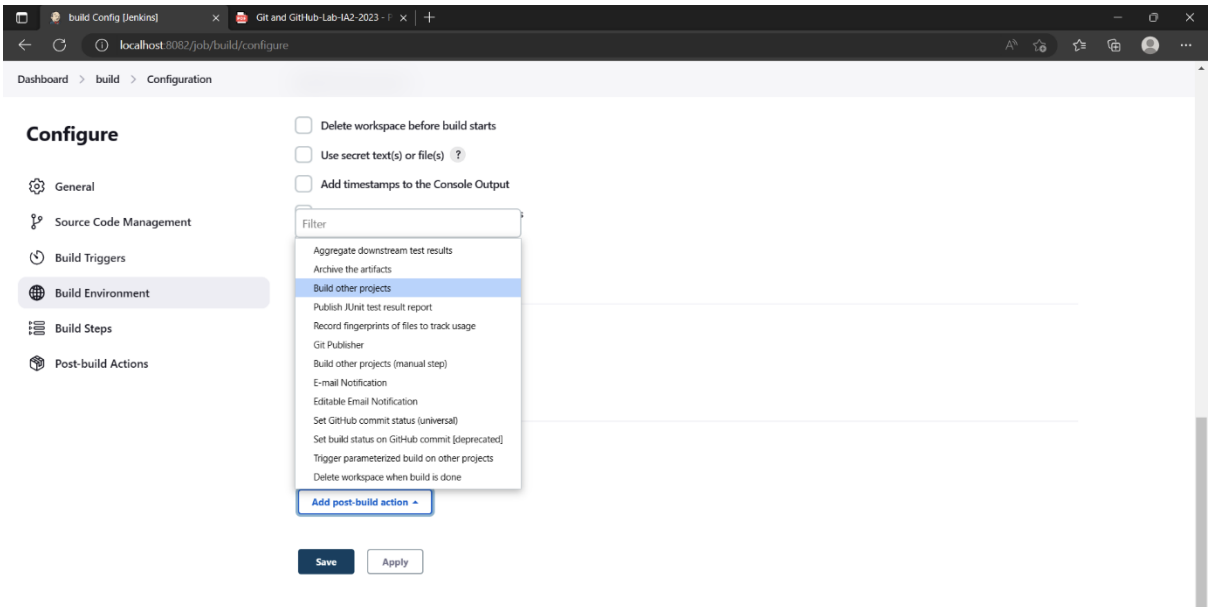


4b. Create a pipeline with at least 4 stages using plugin and demonstrate how to trigger the 3 rd and 4th stage of the created pipeline manually.

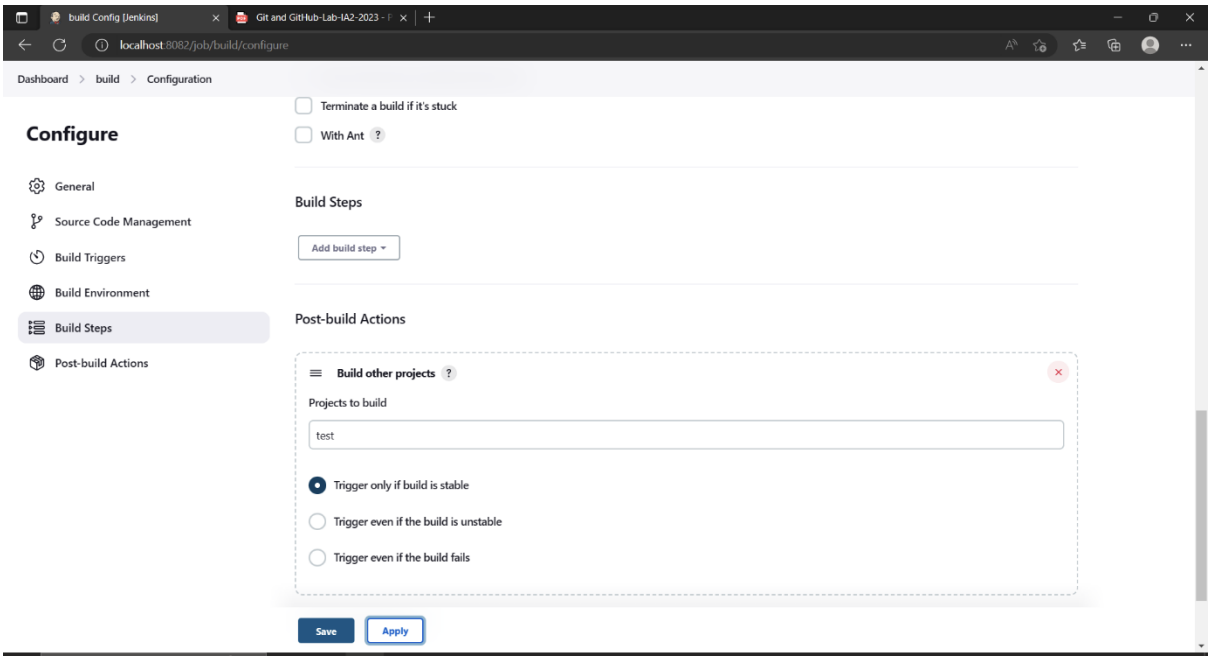
a. Create 4 jobs



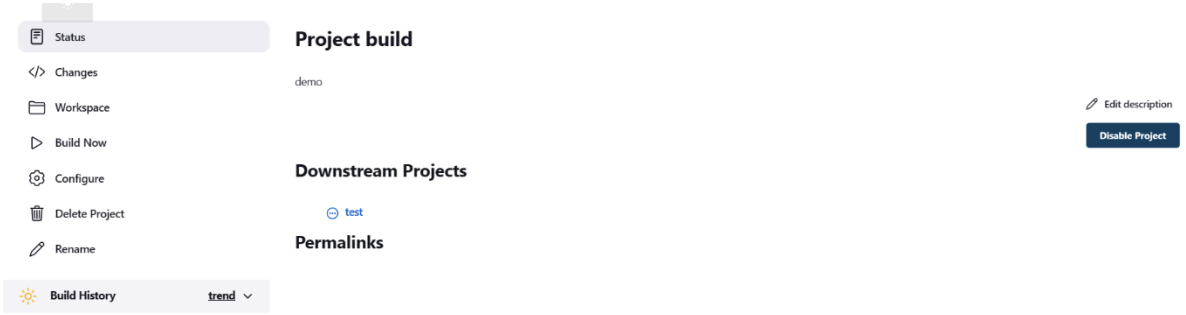
b. Create the filter

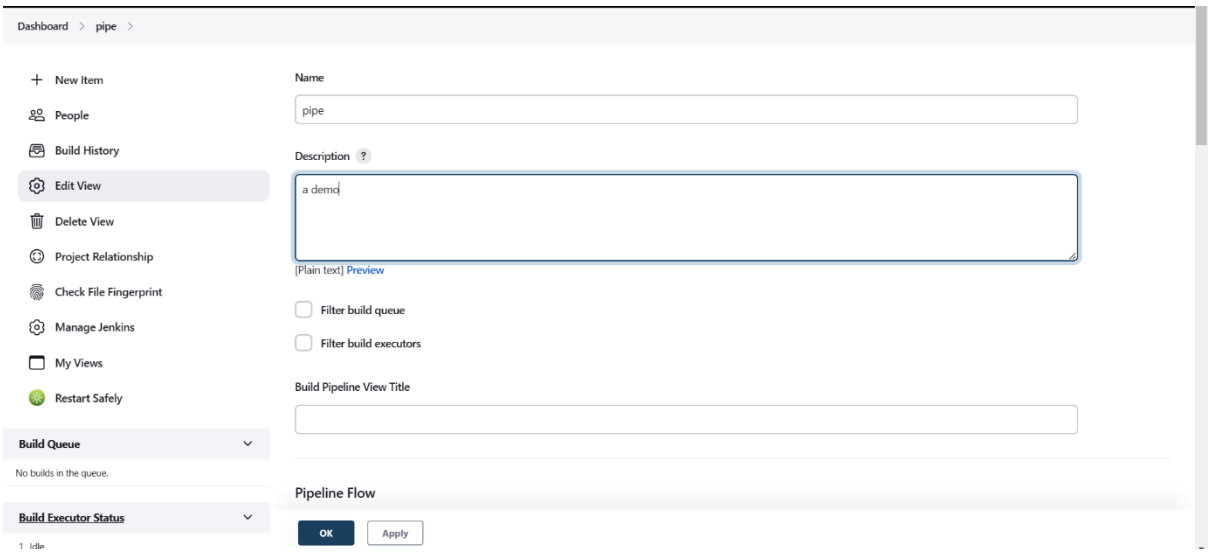


c. Enter the post build project trigger

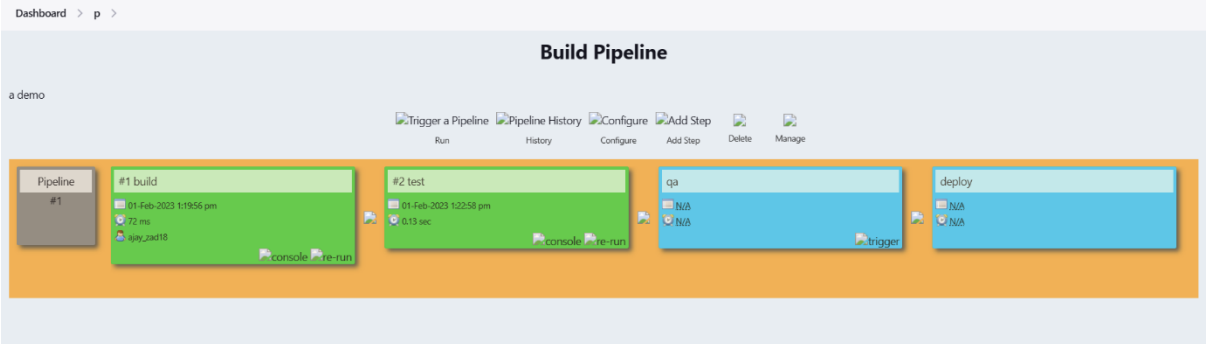


d. For every job select upstream and downstream project

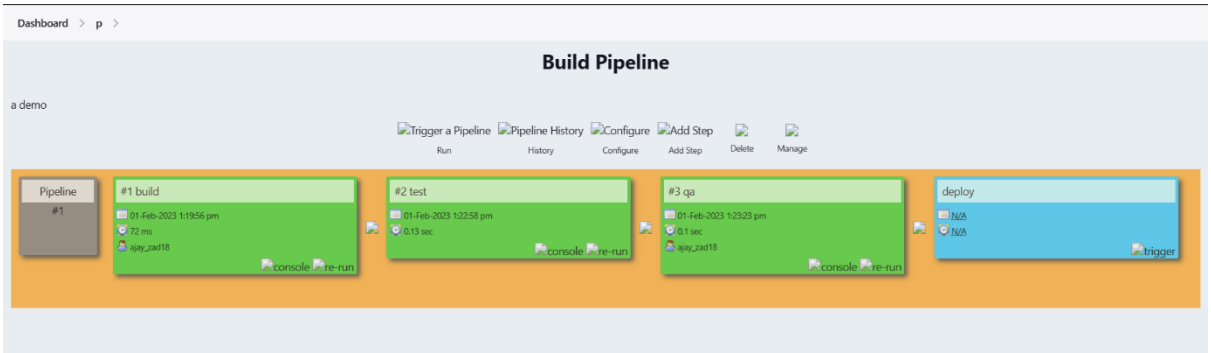




e. The final output



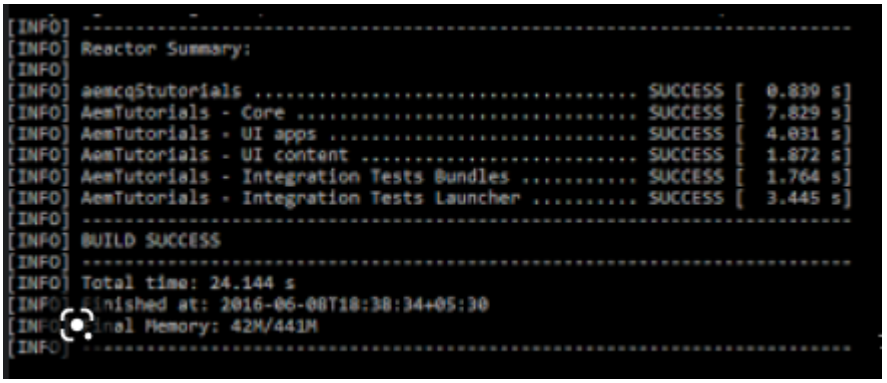
f. Manually click the qa job



5c. Build a maven project project display execute Hello world program by creating pom.xml

mvn archetype:generate -DgroupId=com.MSRIT.app -DartifactId=Nisha -DarchetypeArtifactId=maven-archetype-quickstart -DarchetypeVersion=1.4 -DinteractiveMode=false

Cd Nisha



java -cp target/Nisha-1.0-SNAPSHOT.jar com.MSRIT.app.App

Output: Hello world