Project: continuous integration pipeline using Jenkins

prepared by
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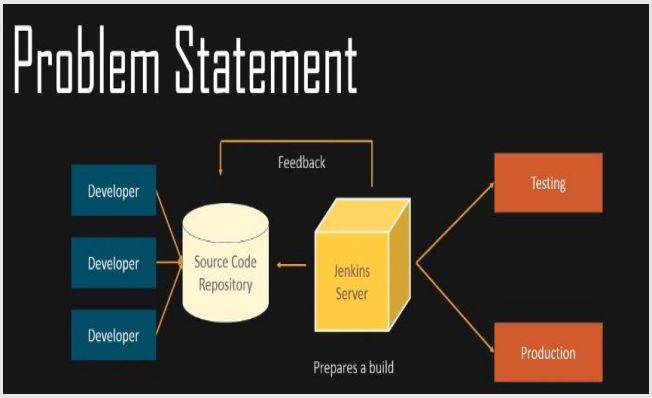
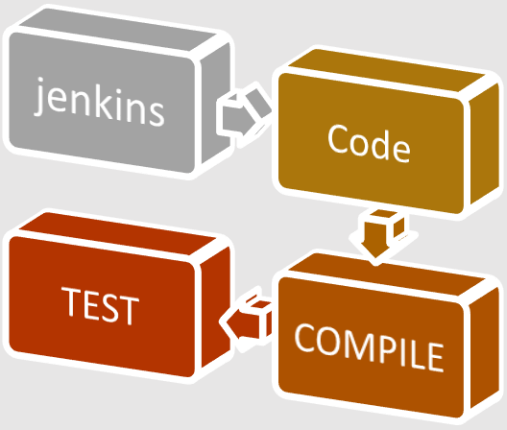
LinkedIn GitHub

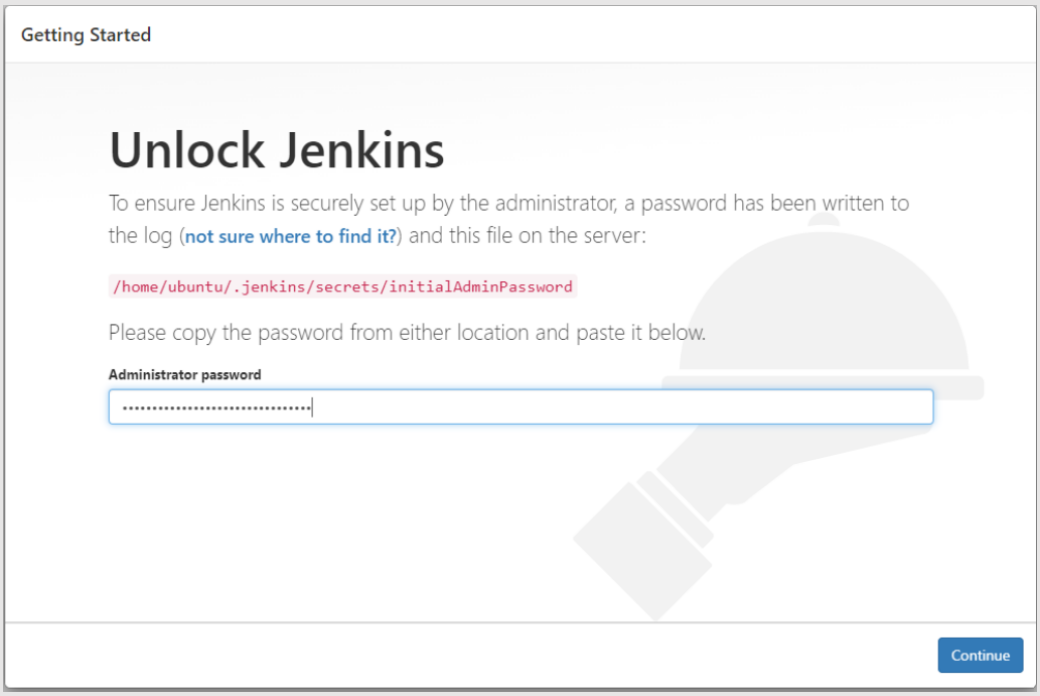
What is our plan?



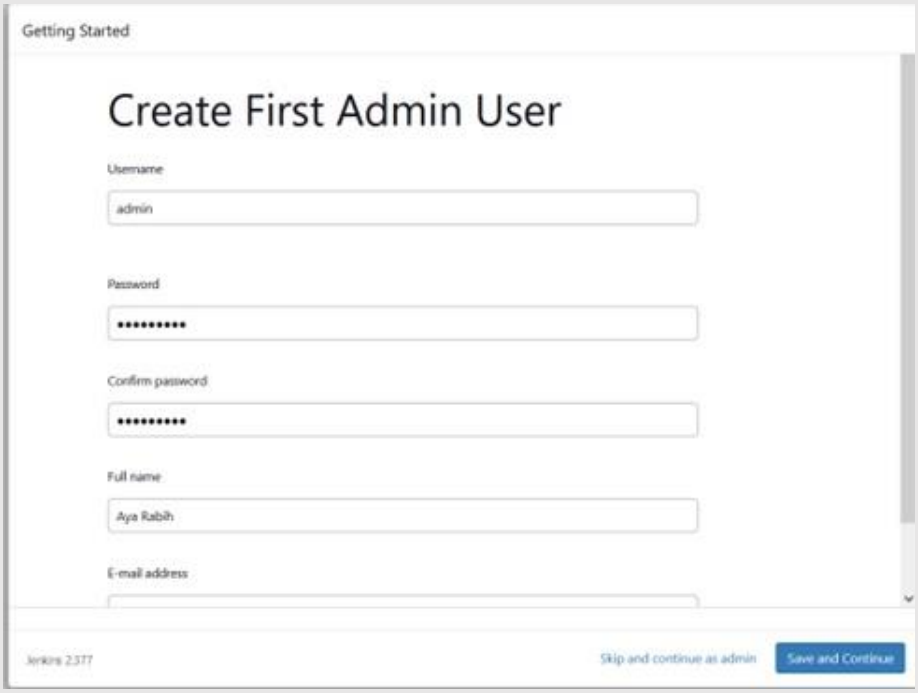


Step 1: install Jenkins

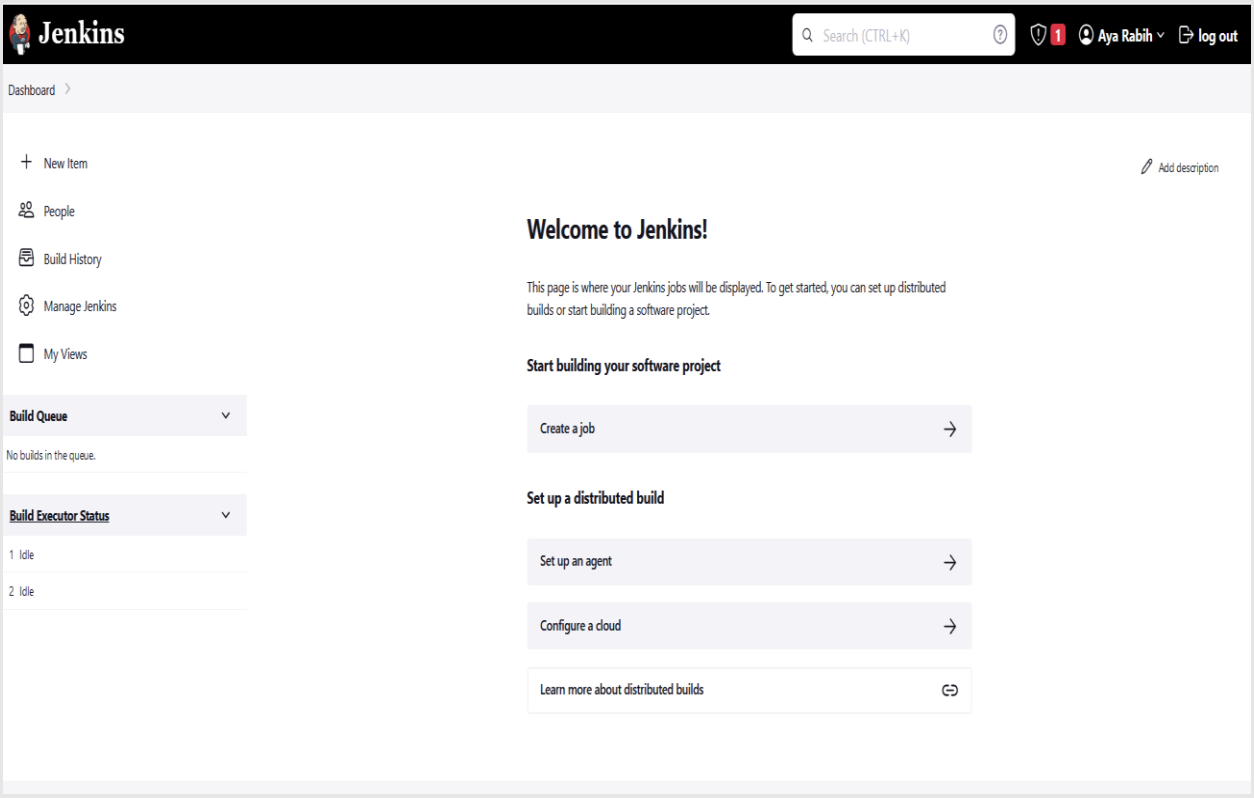
- We will start with Jenkins install
- You should have java version 11 or 16 in pc
- I will use windows by the way OS in URL https://localhost:9090/
- You will download junkies and start to install it and when you complete to install it will open you page to with address to get your password authentication



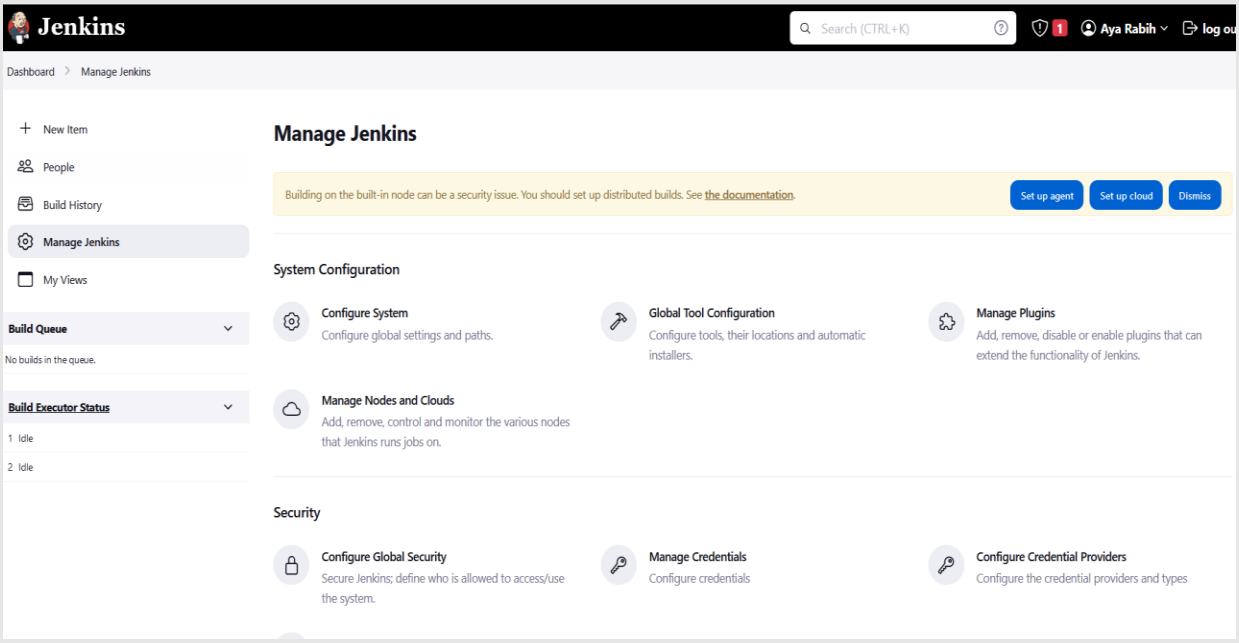
❖ Don’t worry you will change password in this steps



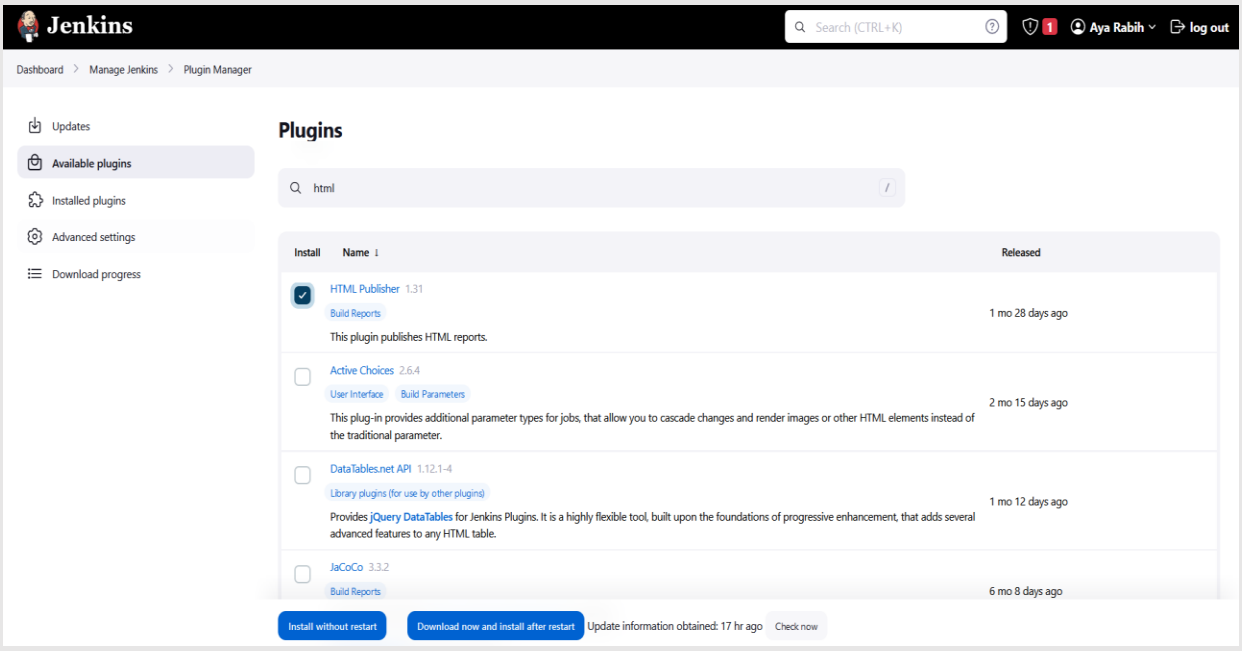
❖ This is the first page you will see it in our project we need to install html plugins



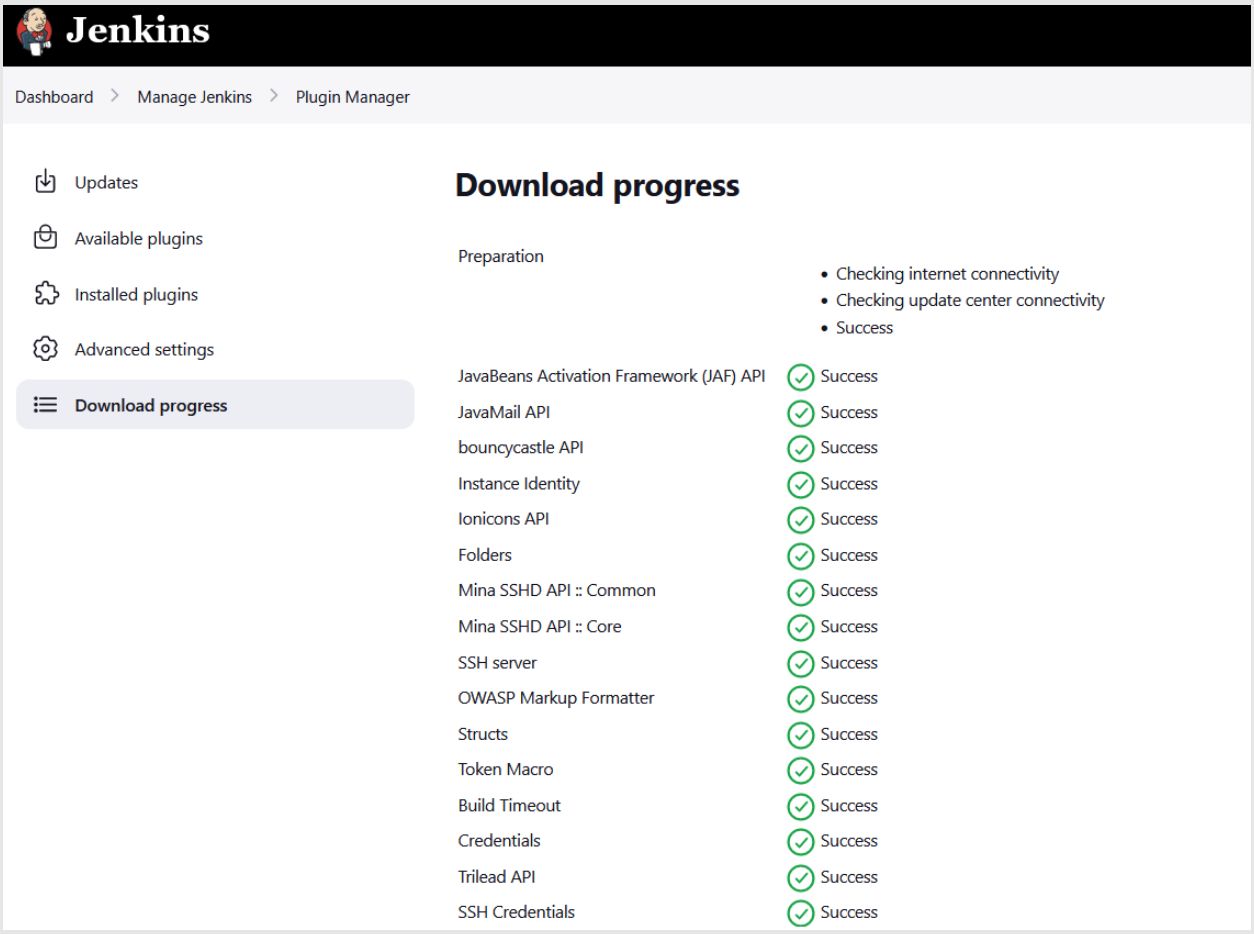
1. click to mange jenkins
2. click to mange plugins



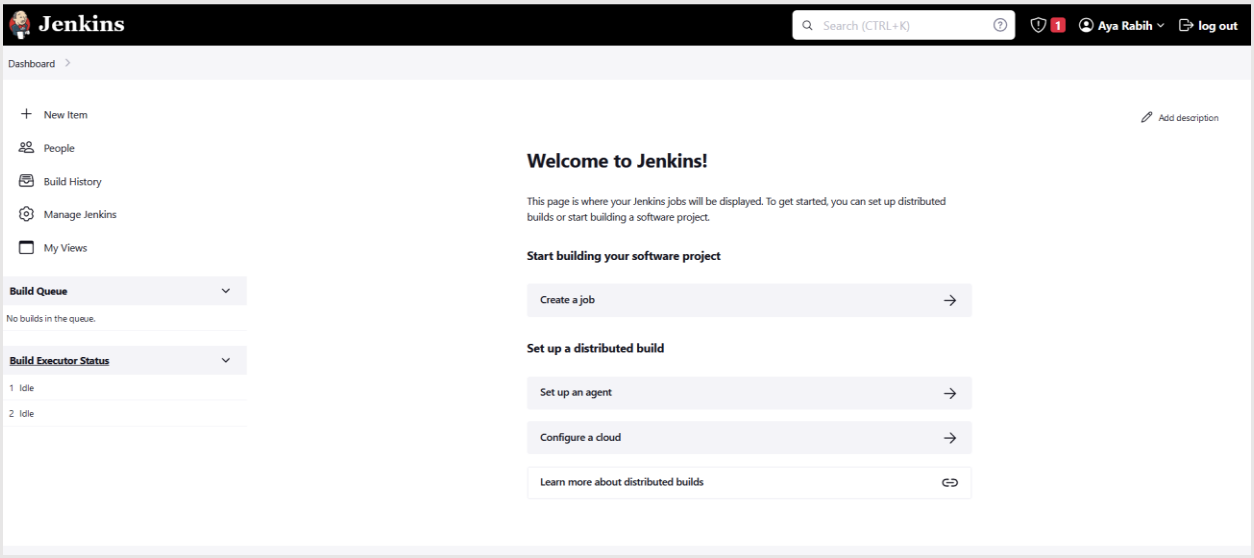
1. click to available plagins
2. write html
3. Click to install without restart



❖ Now it will install all html plugins

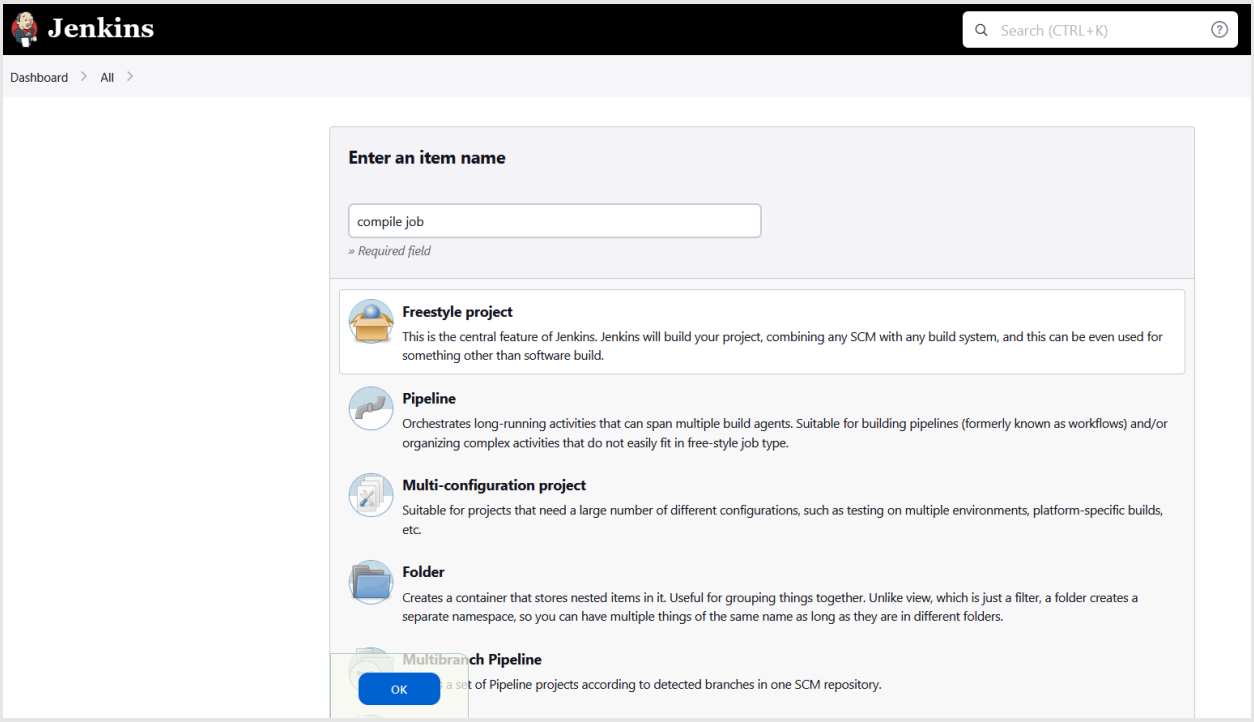


❖ We will create new item to start our project

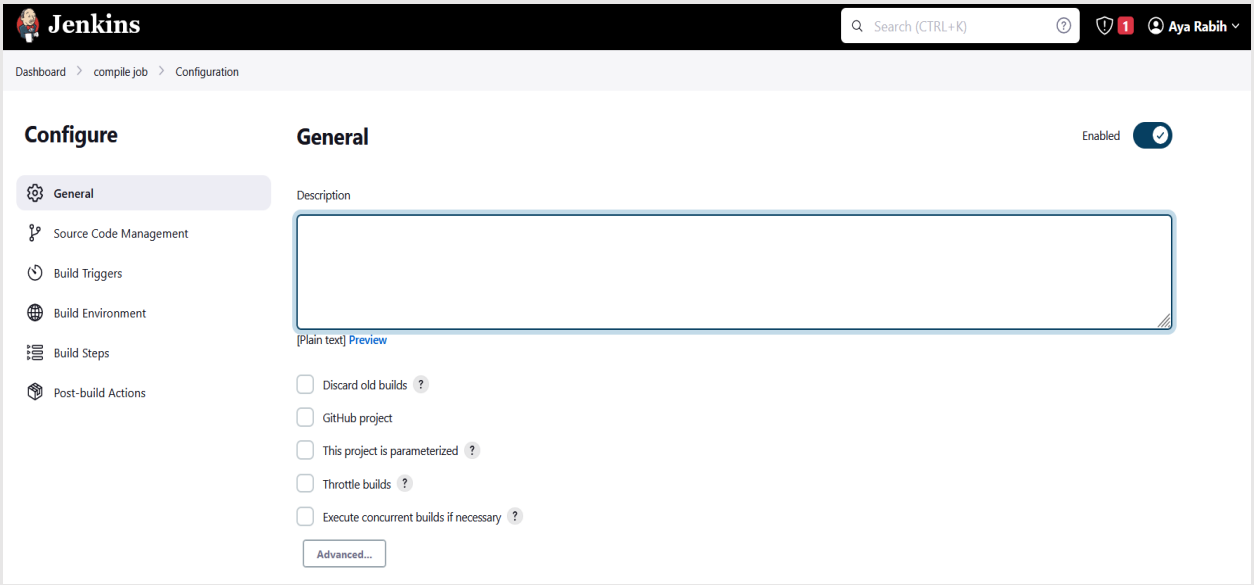


Step 2: create compile job

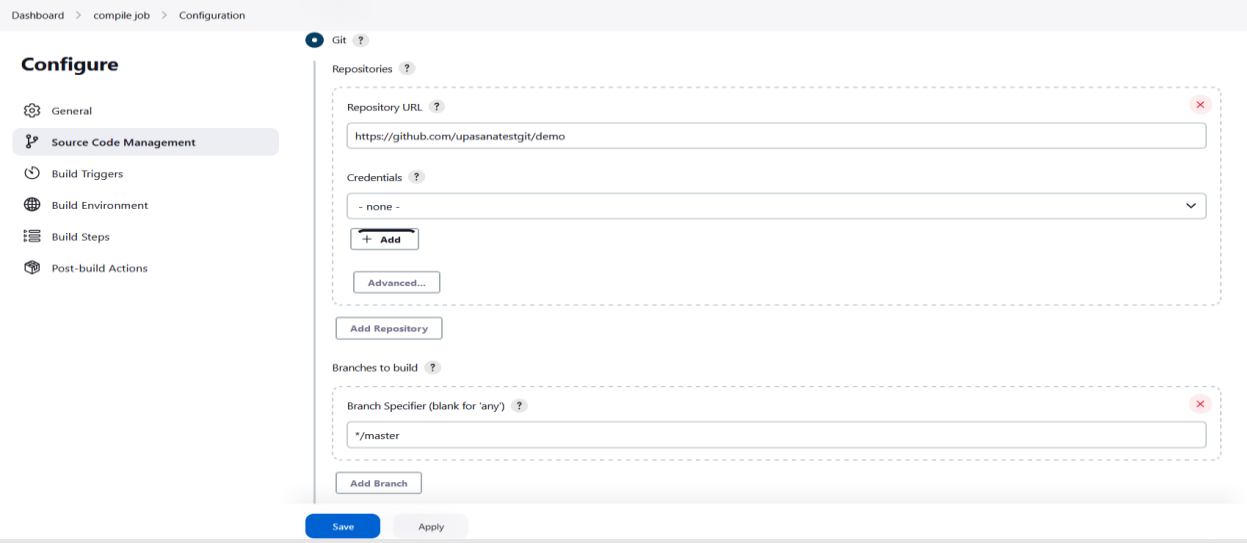
1. We will name our project compile job or any thing you wanna
2. choice freestyle project
3. Ok



❖ You will see this first page in configure page

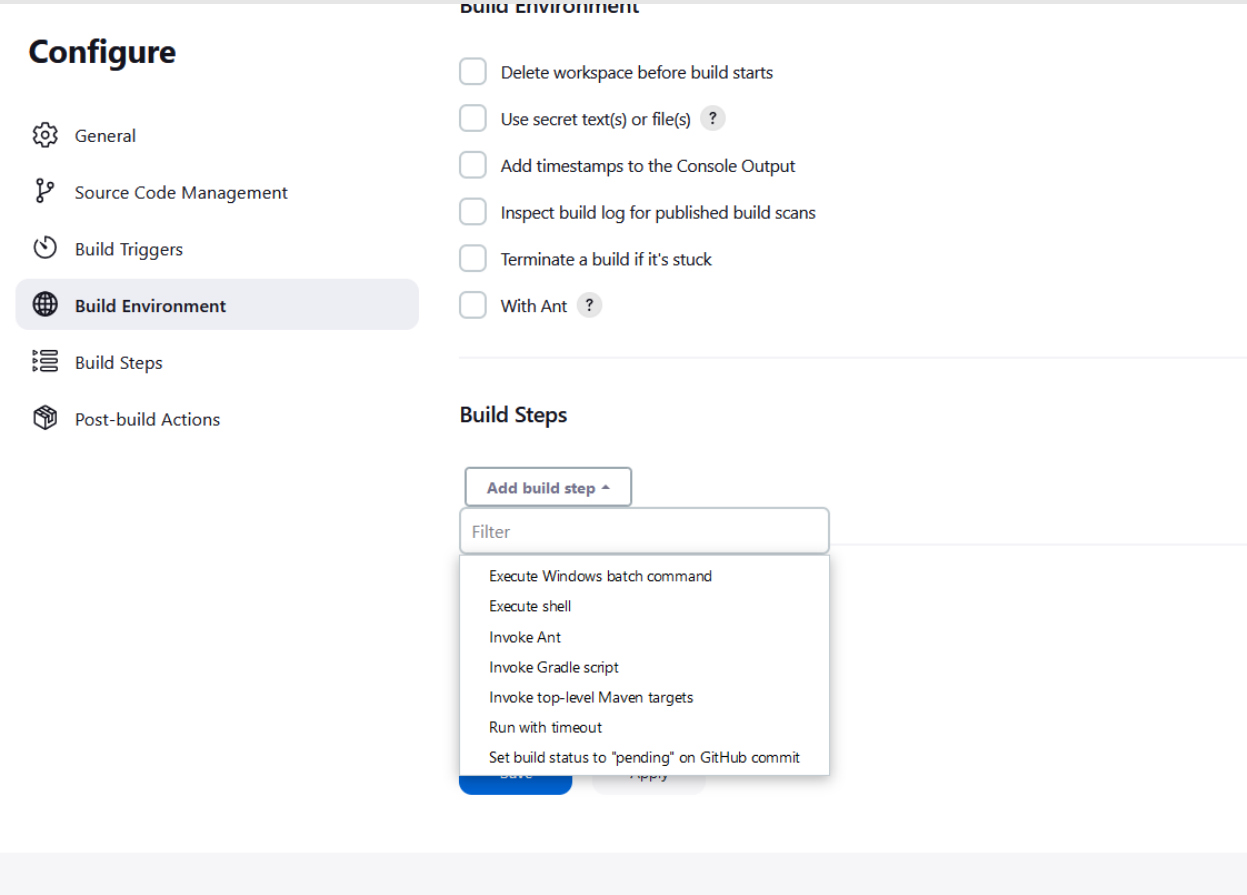


1. https://github.com/upasanatestgit/demo
2. we will use this reposity to clone it in junkins

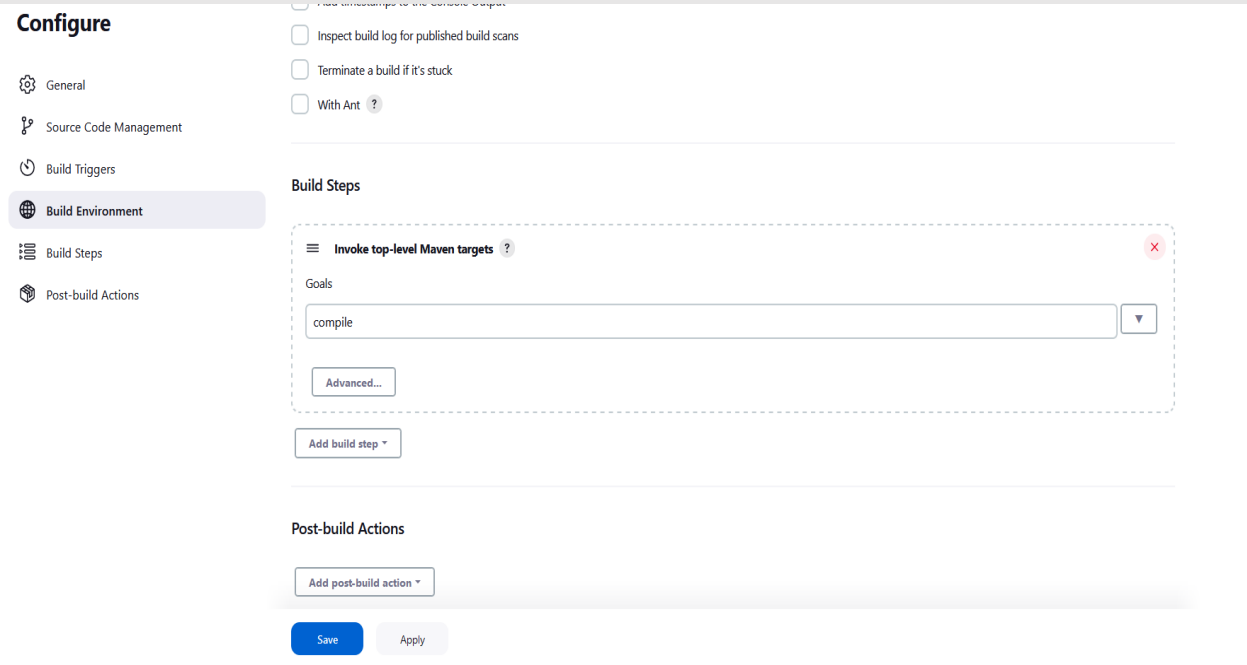


1. Click to build
2. Select invoke top-level maven targets

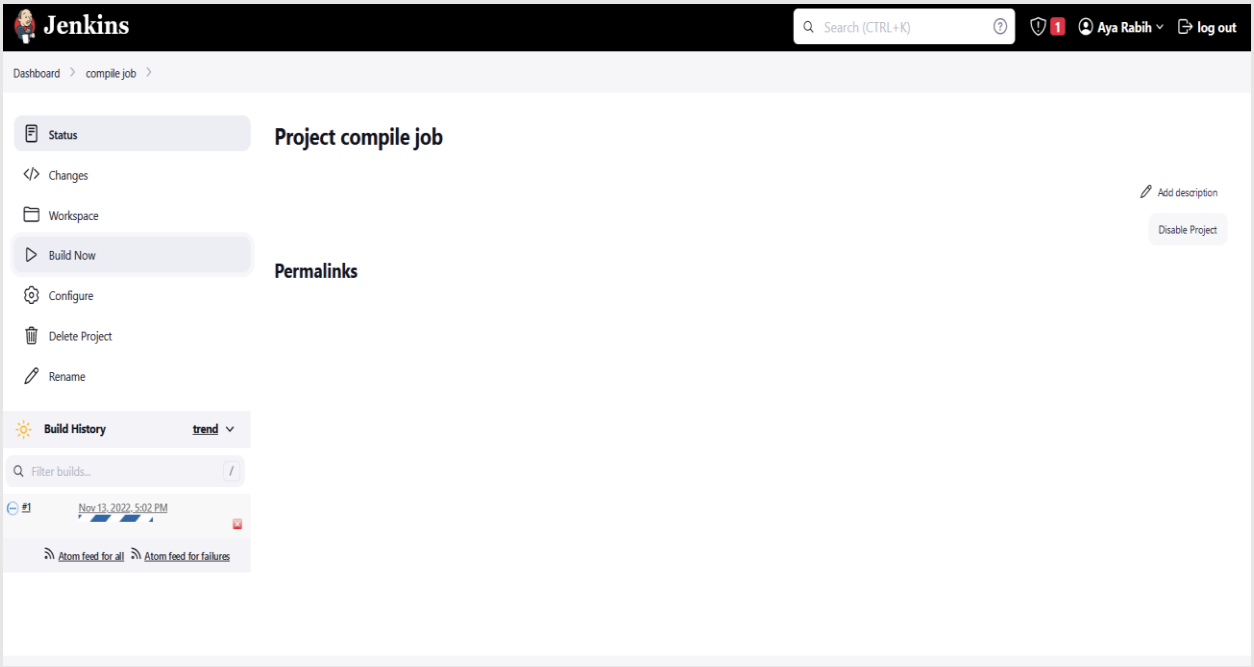
Select



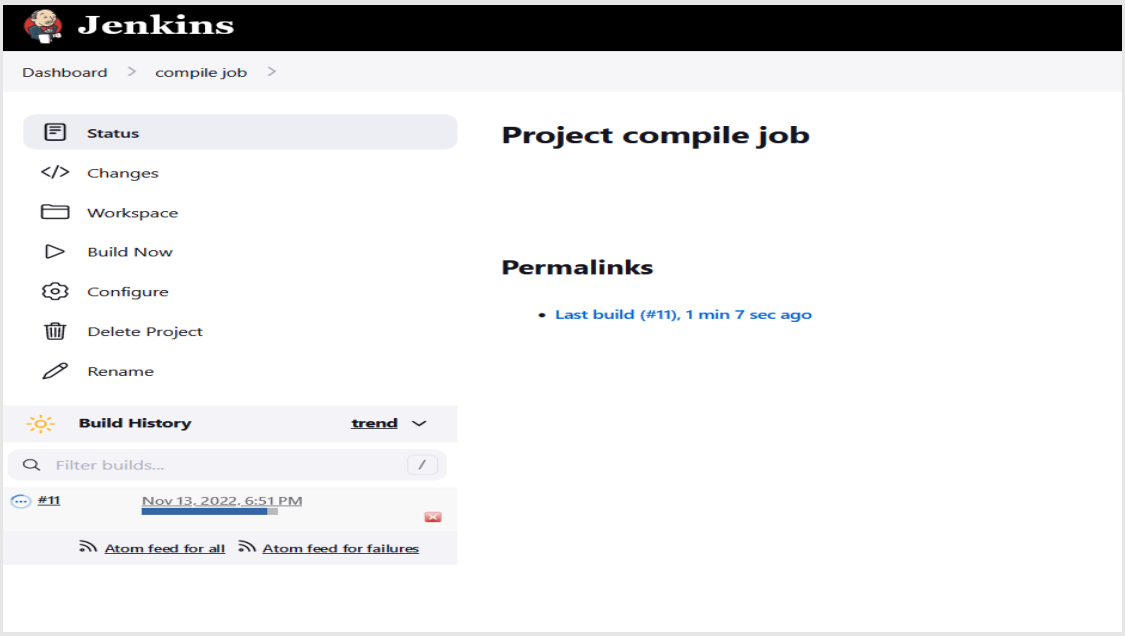
1. We will write compile
2. Save



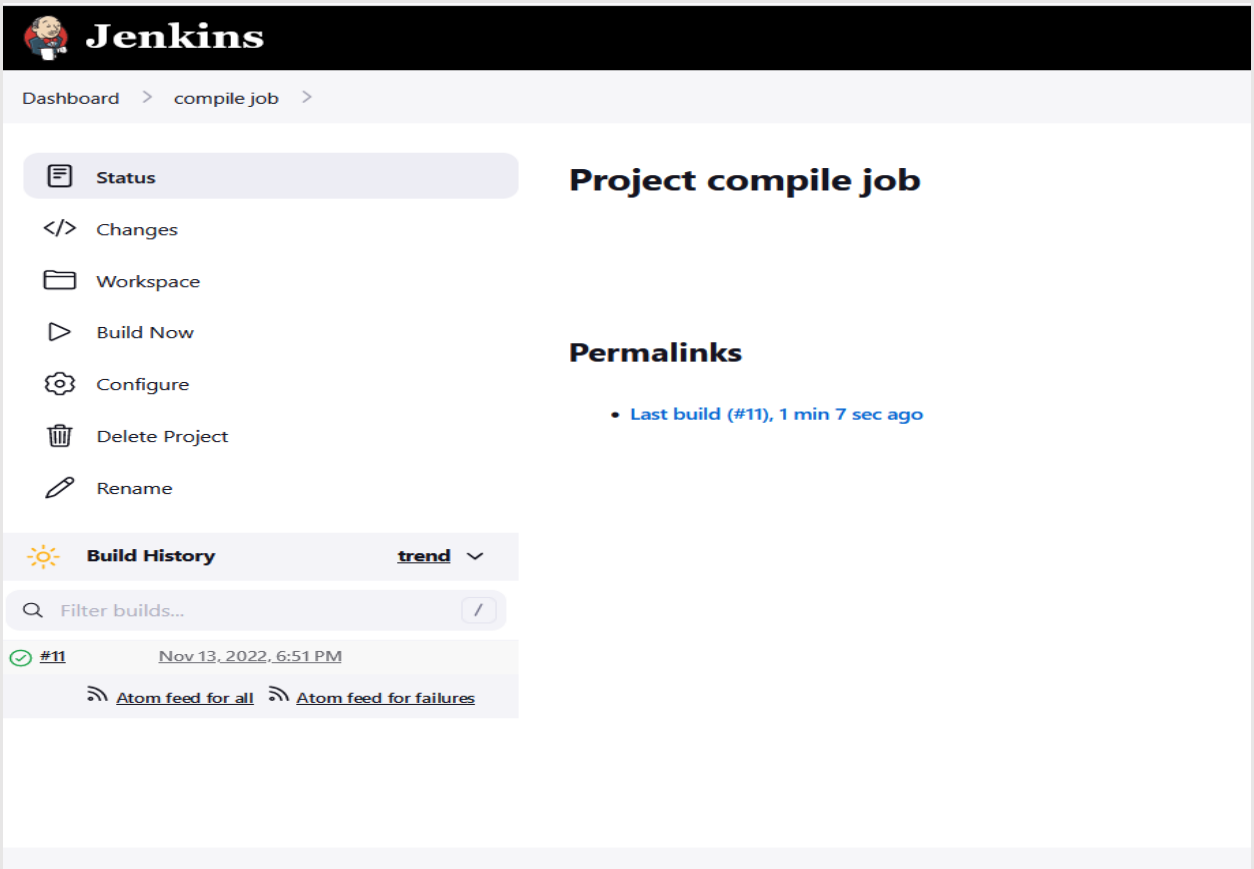
❖ Now we will click to build now



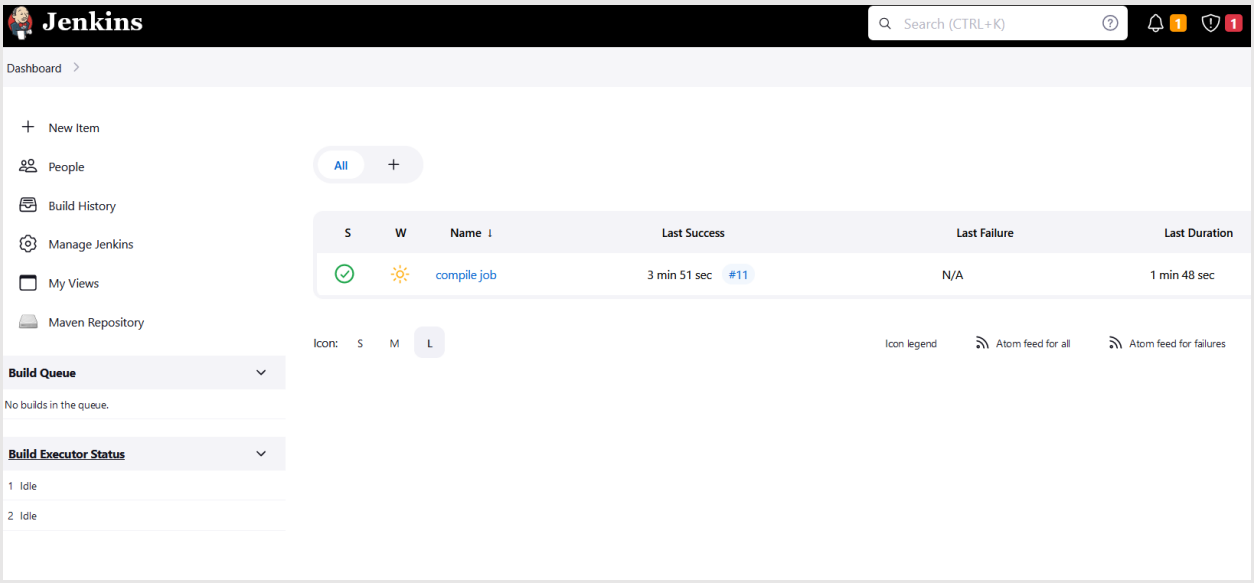
❖ These steps run compile job



❖ Now it is green done this step of compile the code



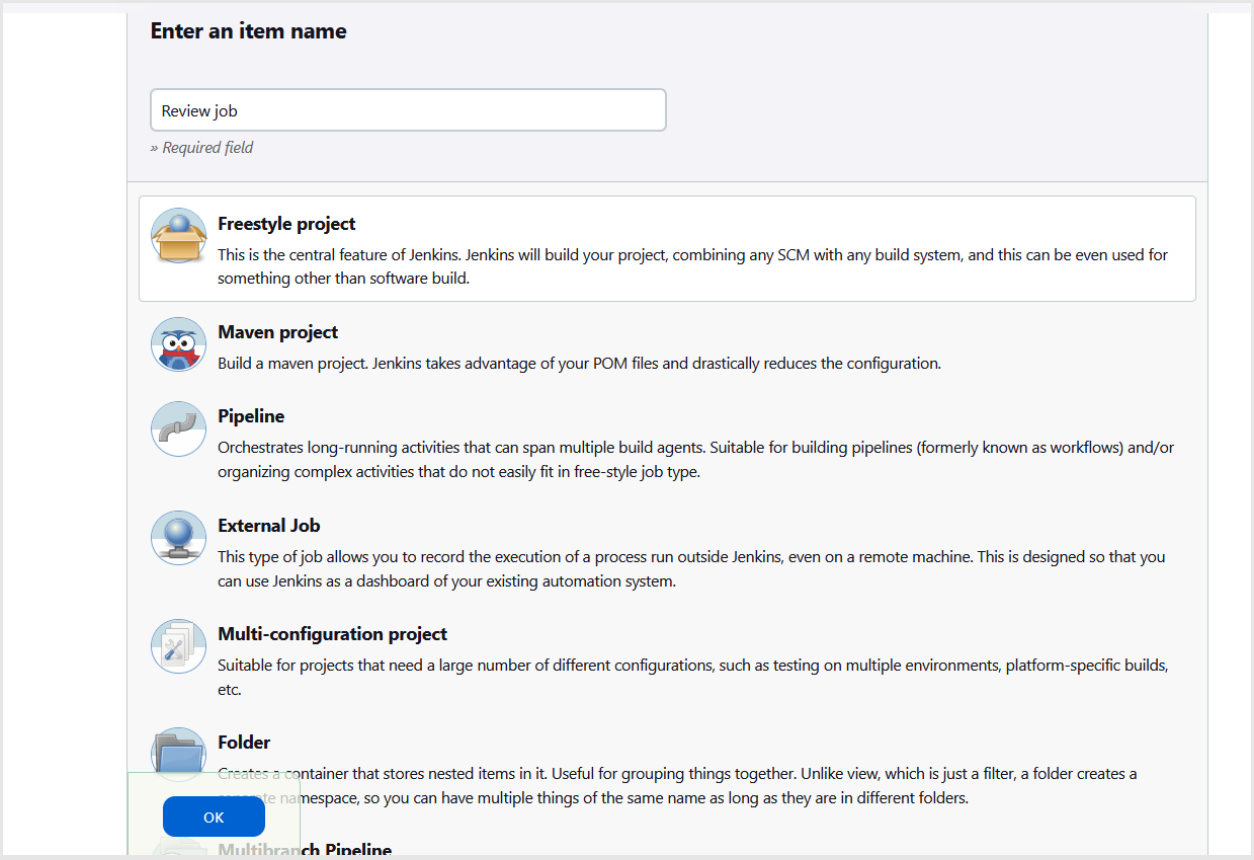
❖ These steps show us compile job done



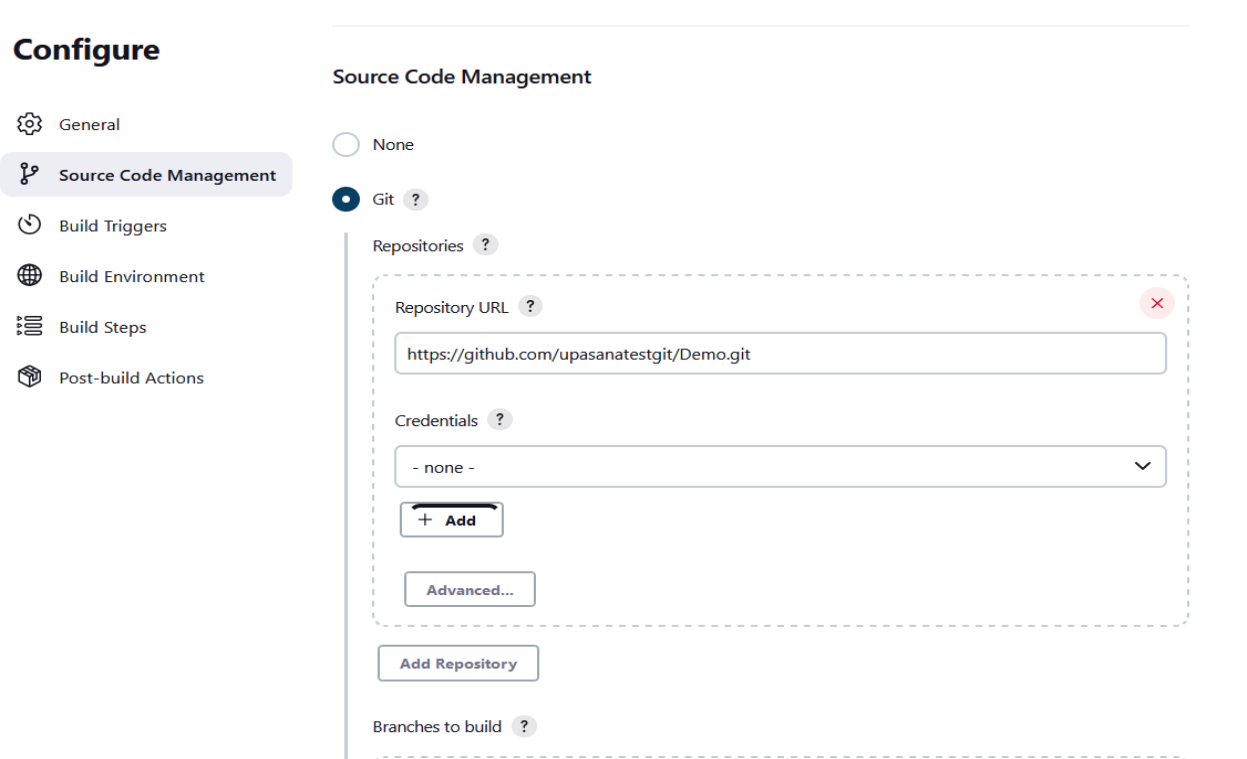
Step 3: create Review job

❖ Now we need to testing so junkies will deploy the code onto a test server for testing

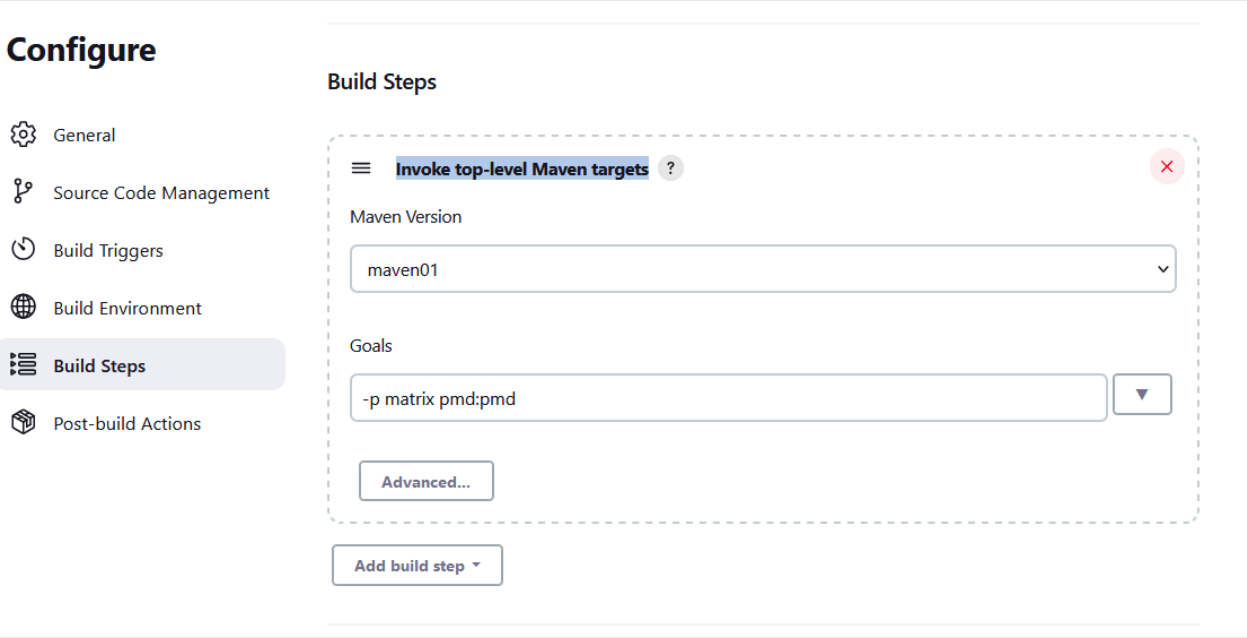
❖ We will make new item for testing name it Review job and click to freestyle project



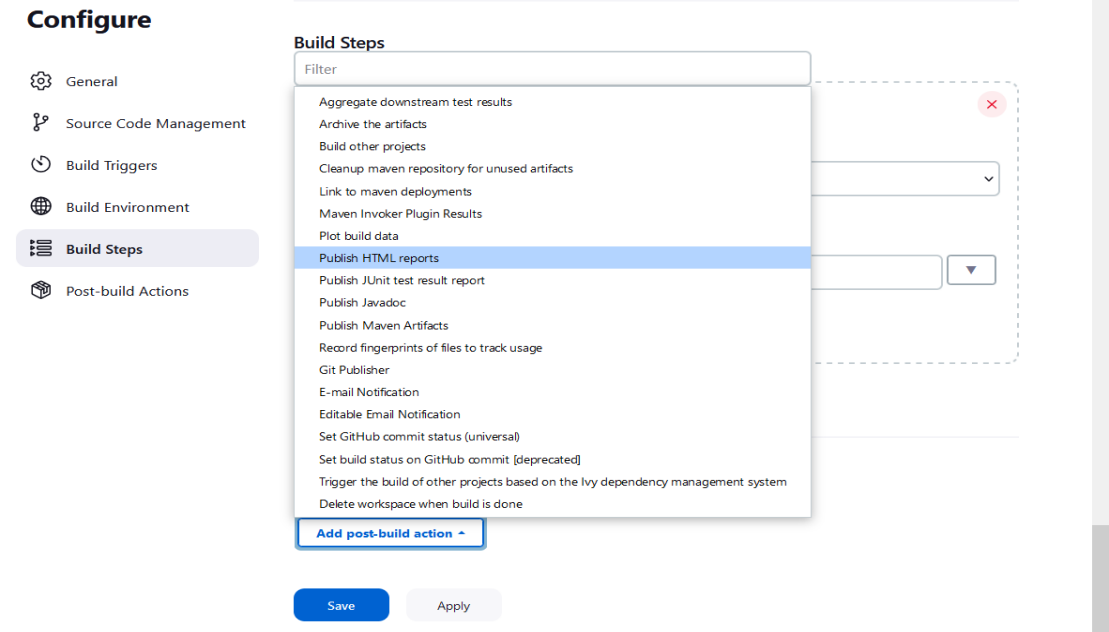
https://github.com/upasanatestgit/Demo.git



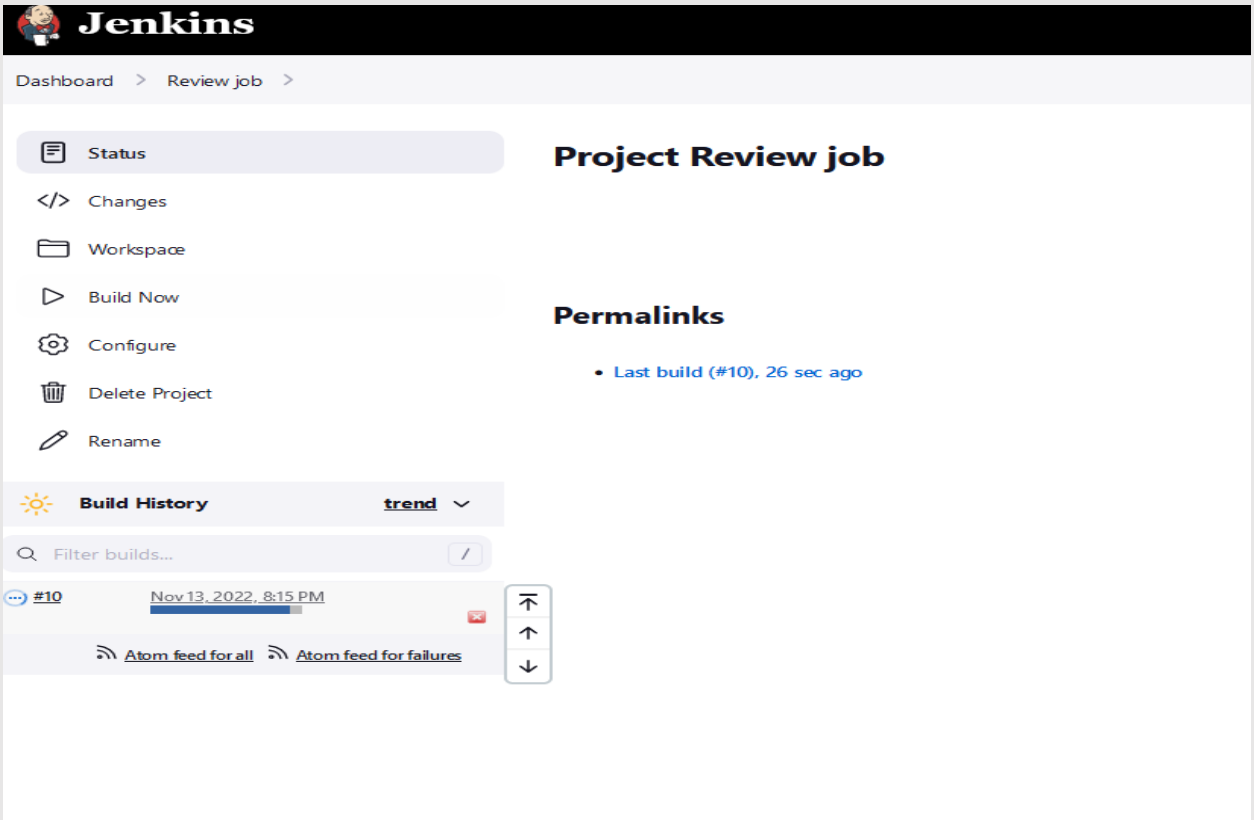
1. Invoke top-level Maven targets
2. Build Steps
3. -P matrix pmd:pmd



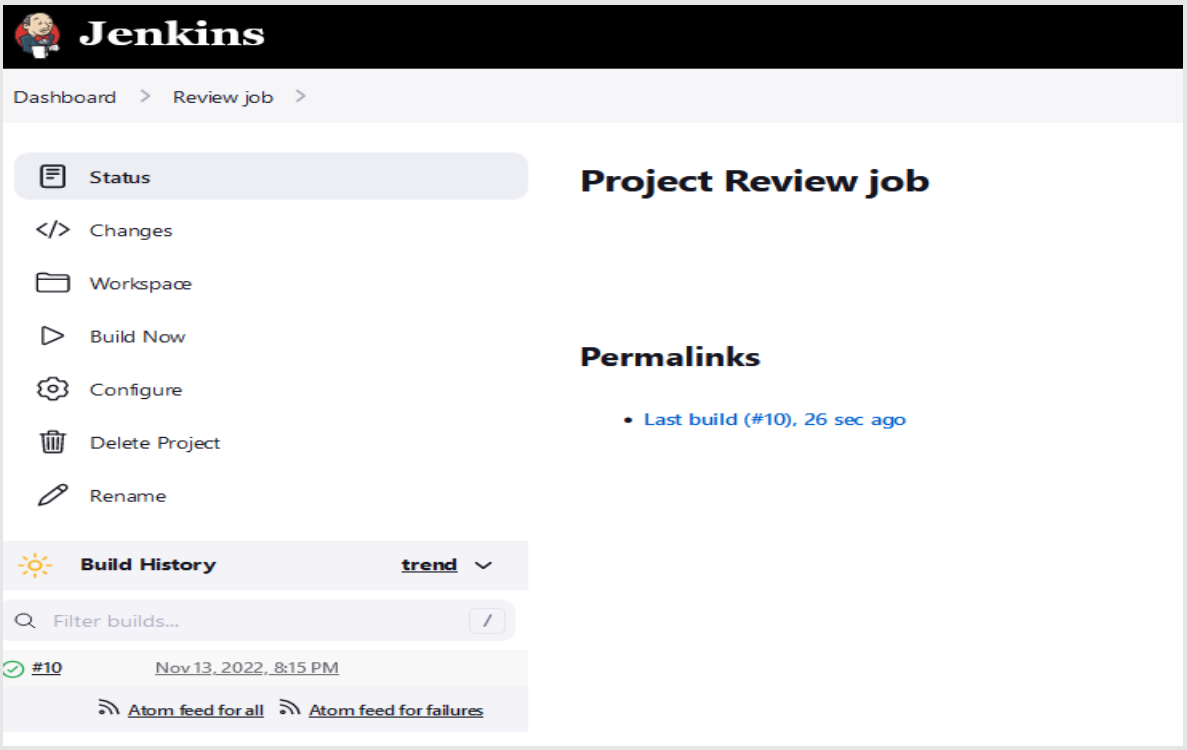
1. Post-build Actions
2. Publish HTML reports



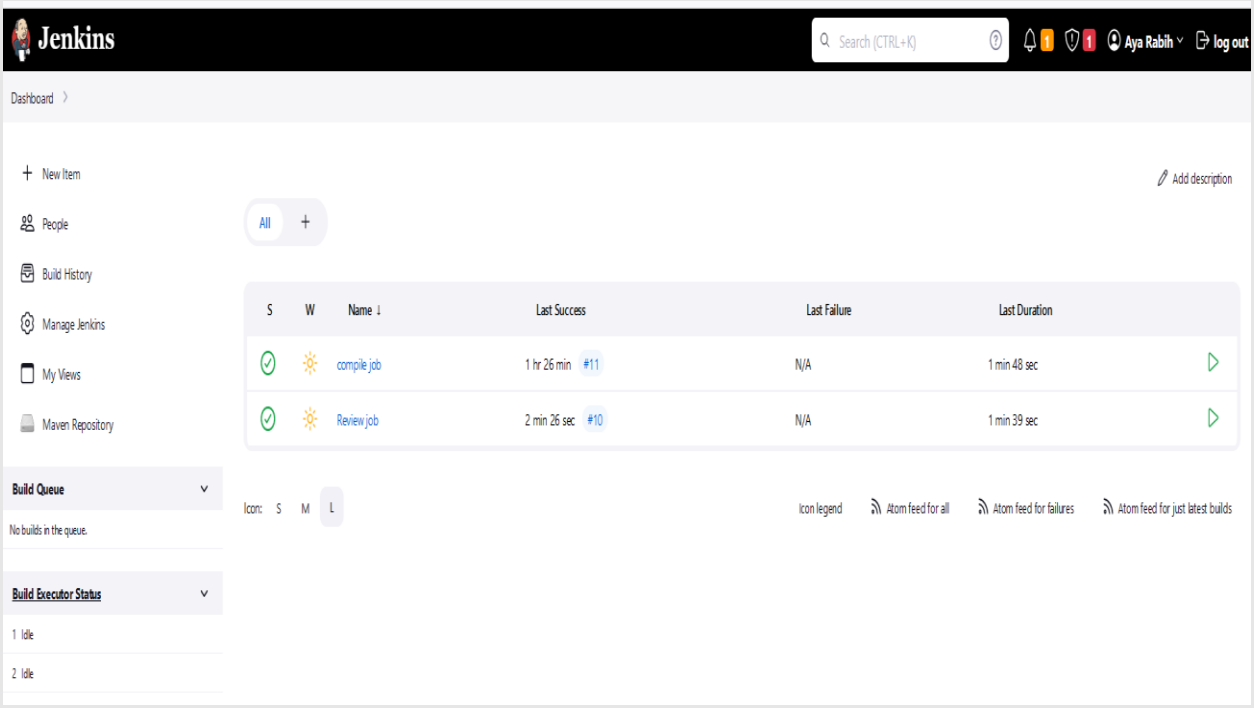
- Now it will start run review job



❖ Review job done

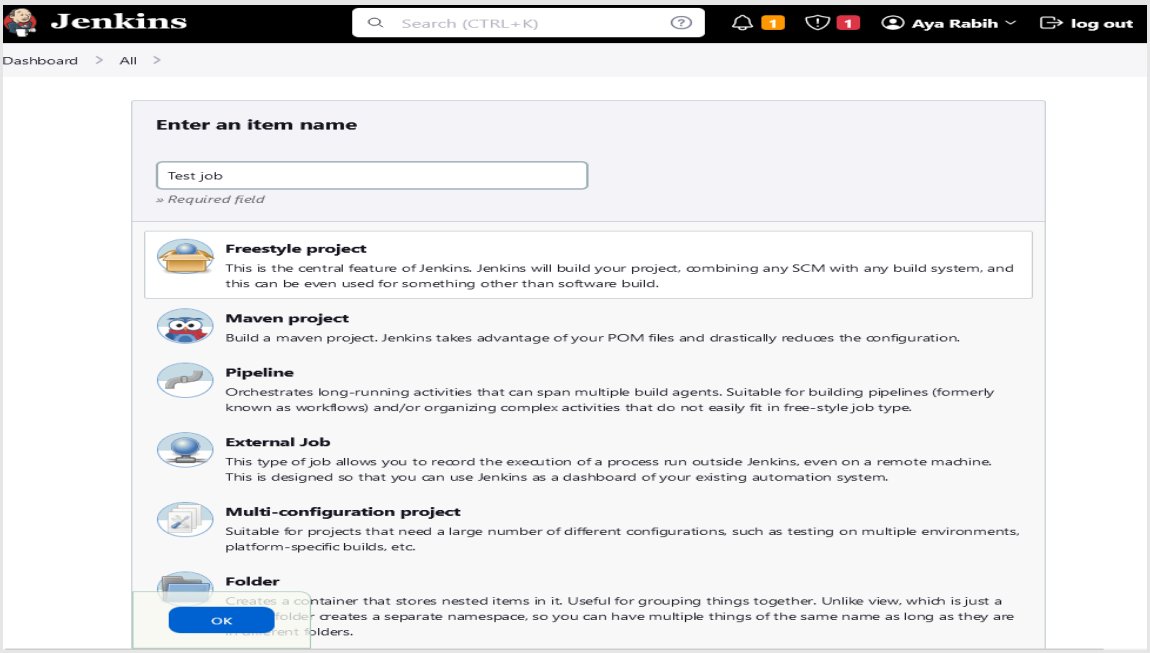


❖ Now we complete two job compile and review job

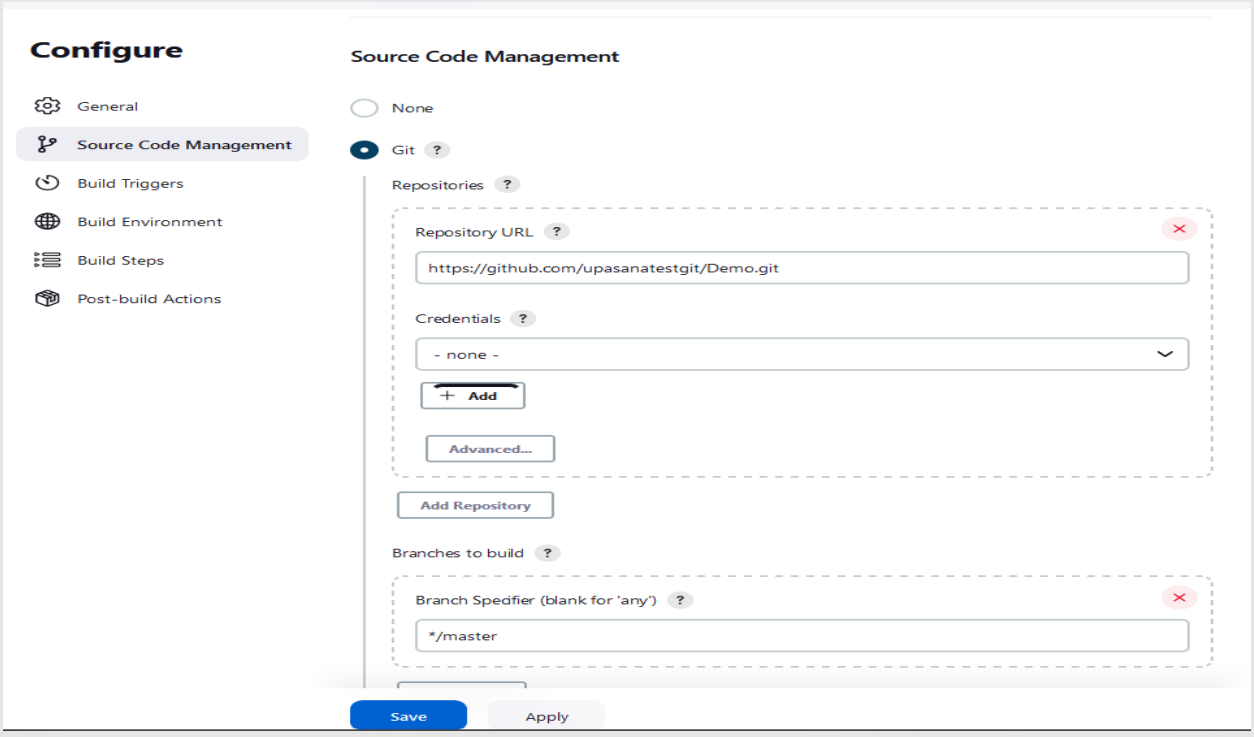


Step 4: create test job

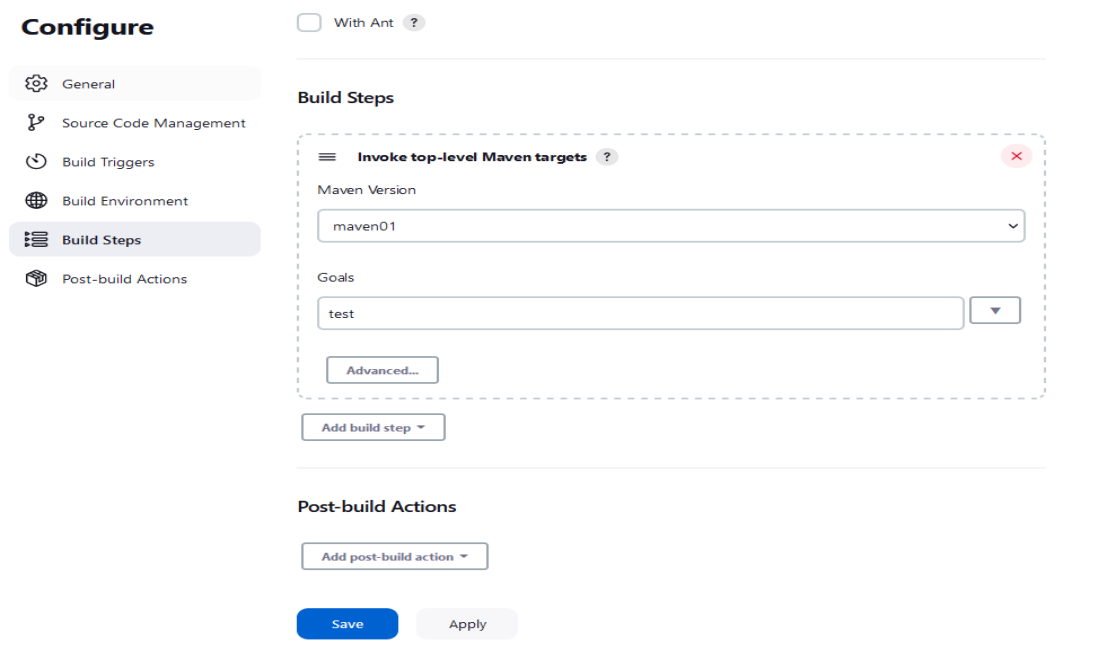
1. Test job
2. Freestyle project
3. ok



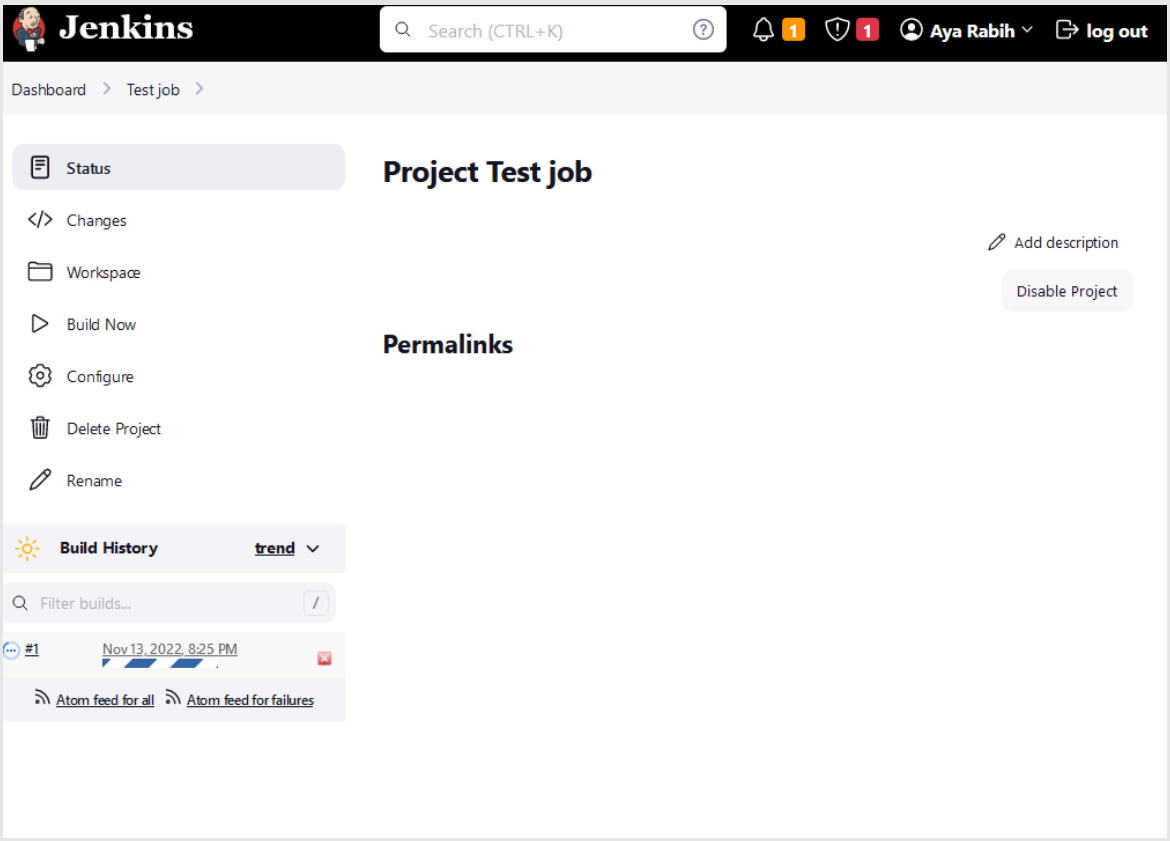
- https://github.com/upasanatestgit/Demo.git



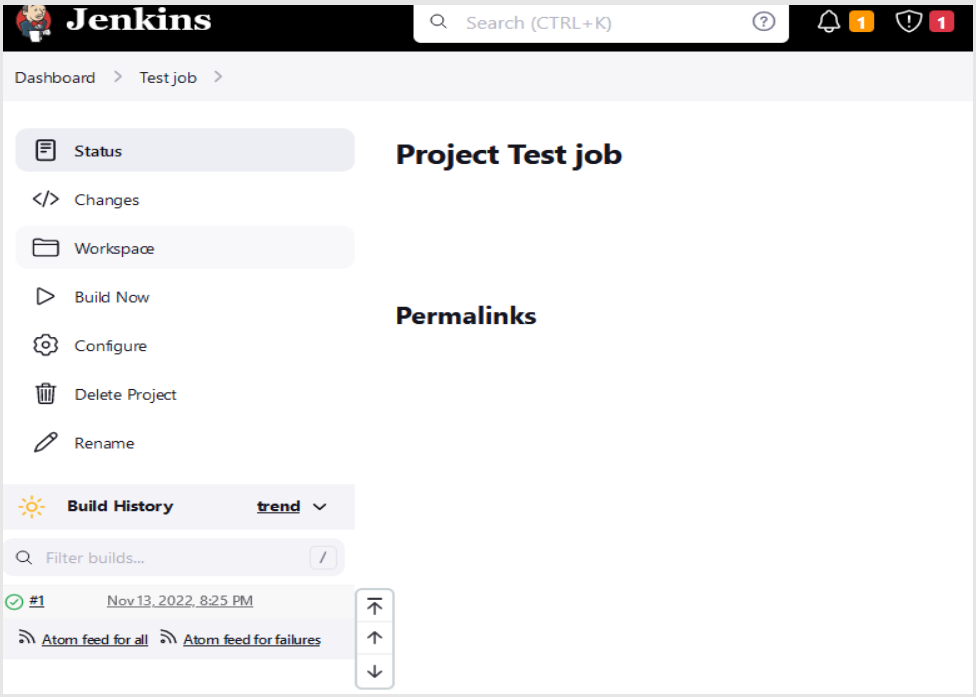
1. Build Steps
2. Invoke top-level Maven targets ?
3. Test



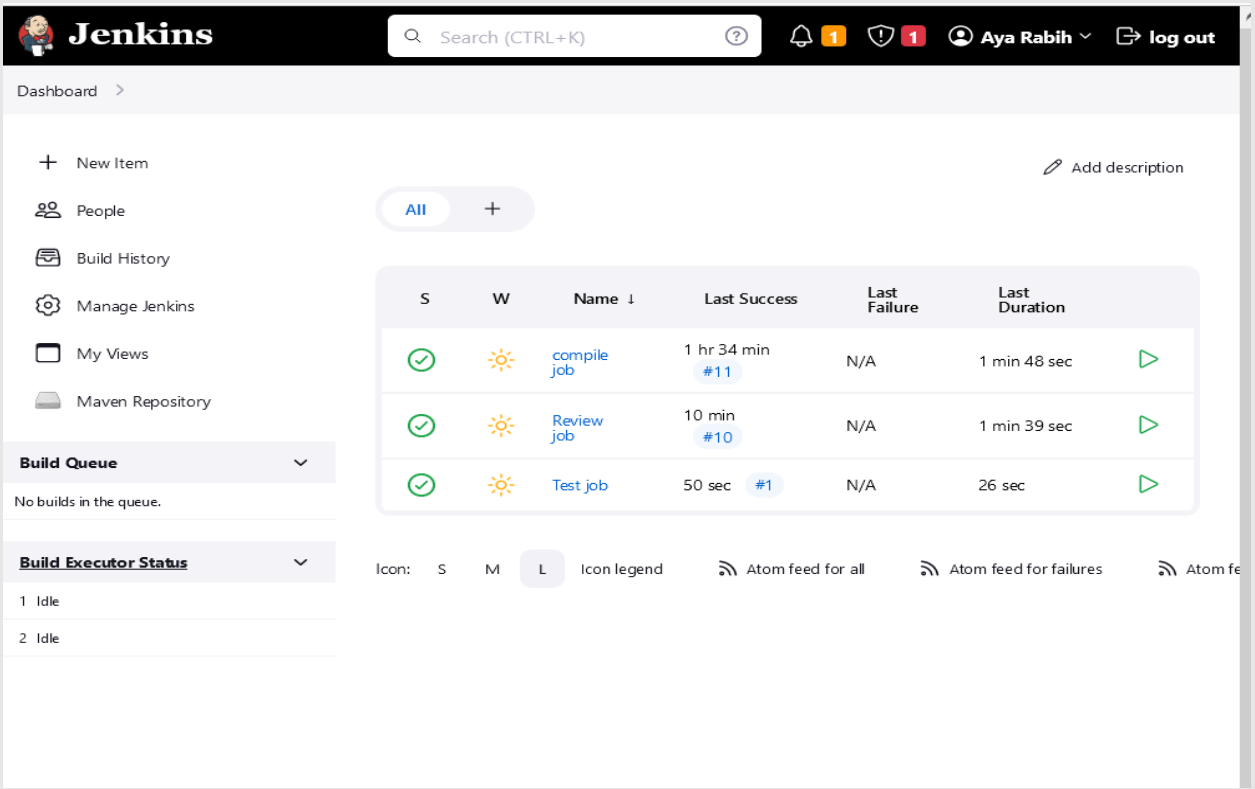
- Now test job running



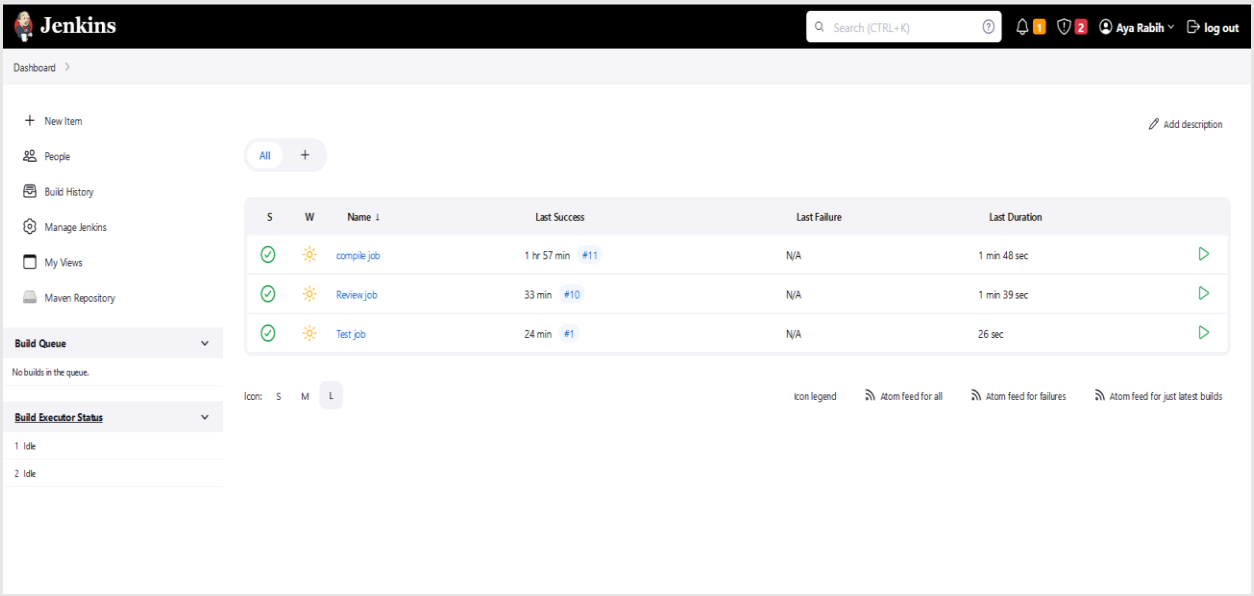
- Now it is done for test job



So we have now all steps done we need now to make pipeline for them

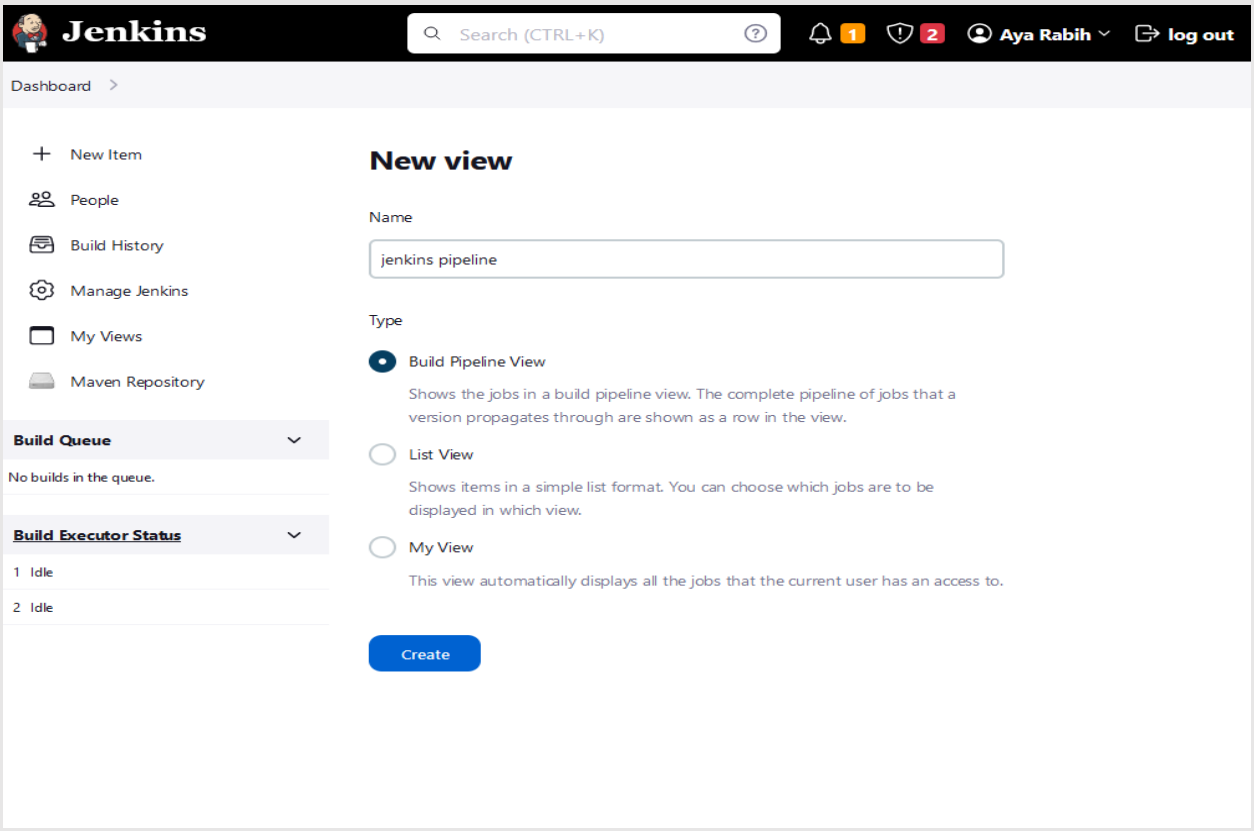


❖ Now we will click to + to make pipeline

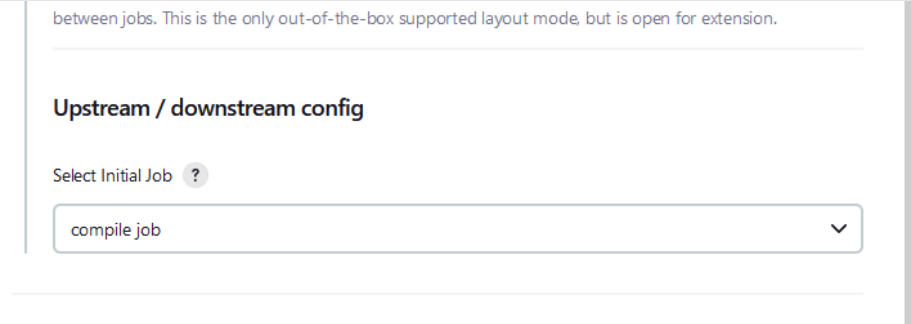


Step 5: create Jenkins pipeline

1. We will name this project Jenkins pipeline
2. Click to build pipeline view
3. create



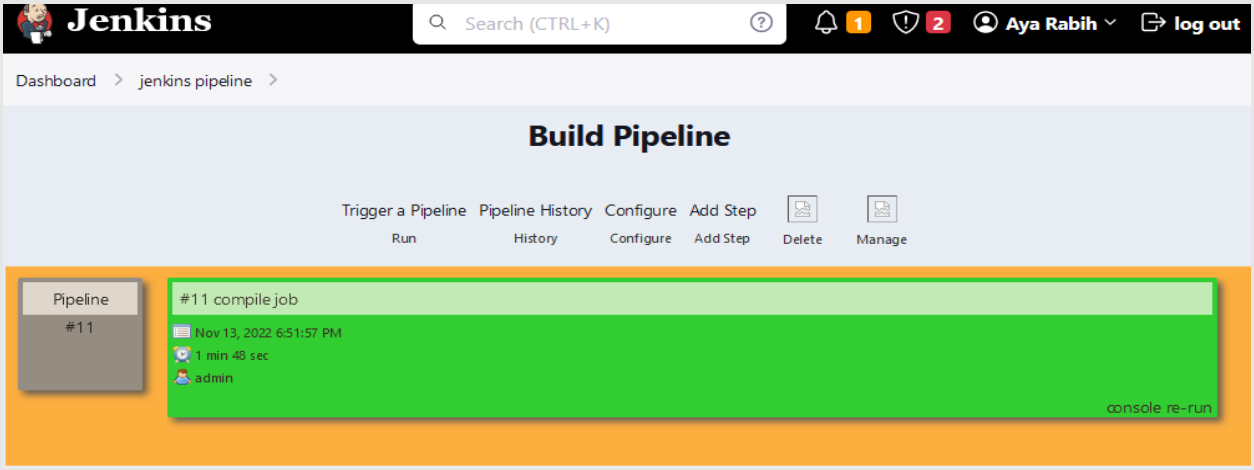
- we will start with compile job



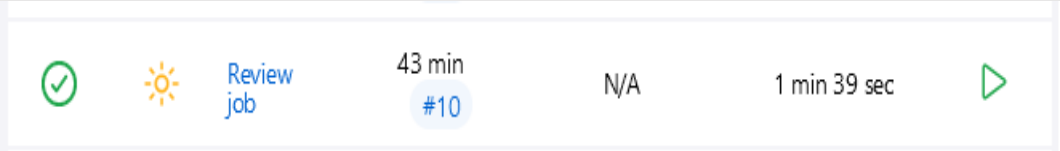
- Select the No Of Displayed Builds from 1 to 5

- Like that

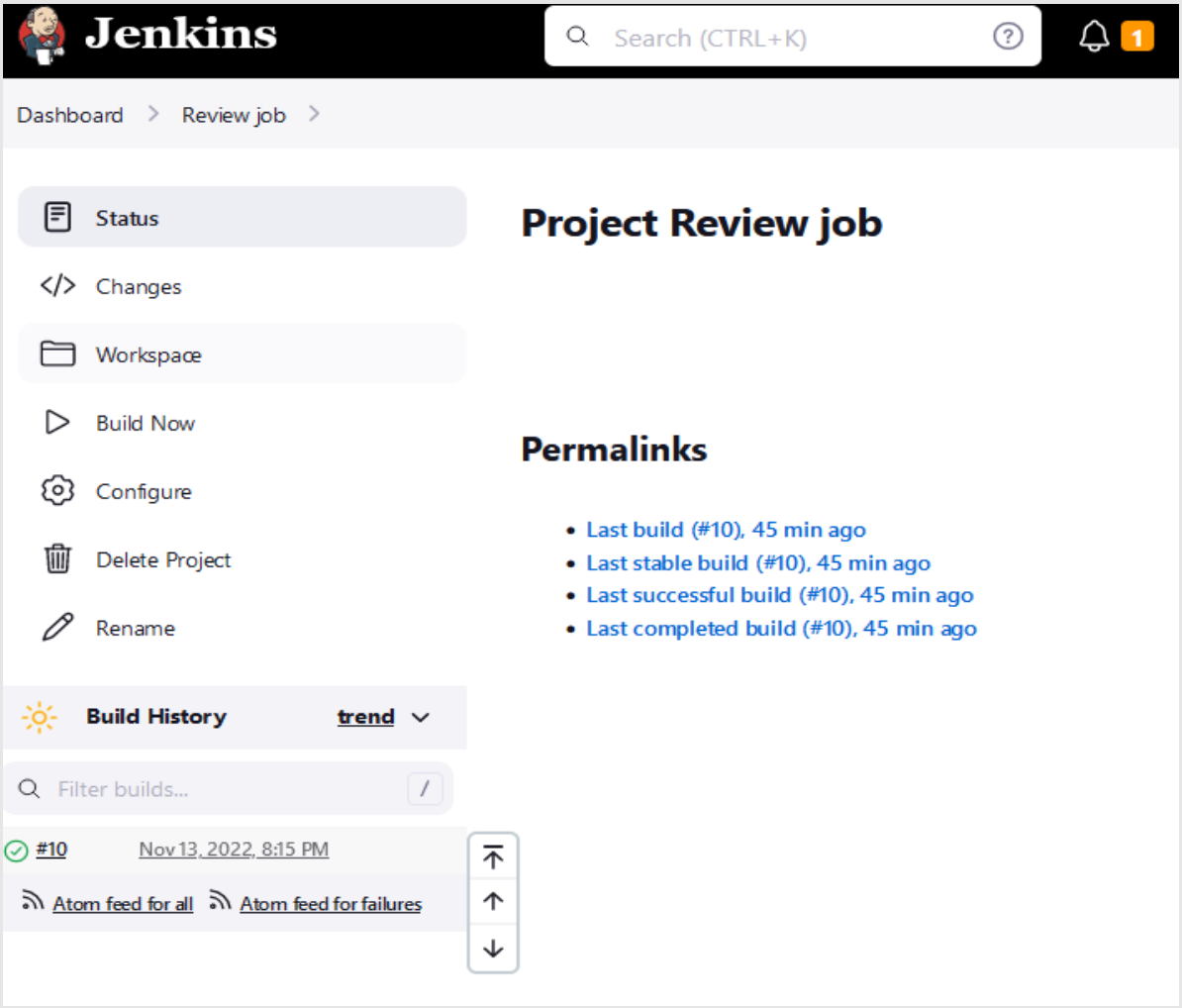
- Now click okay
- Now done for compile job in pipeline



- Now we will go to Review job

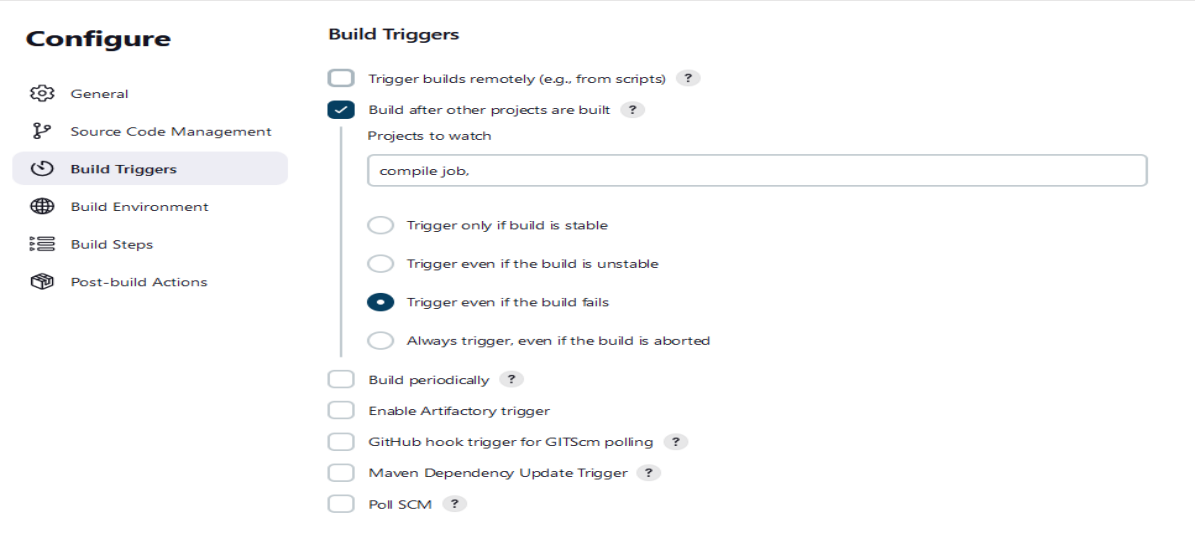


- Click to configure

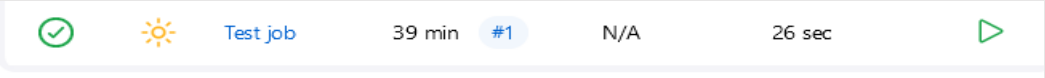


- Now we will click to

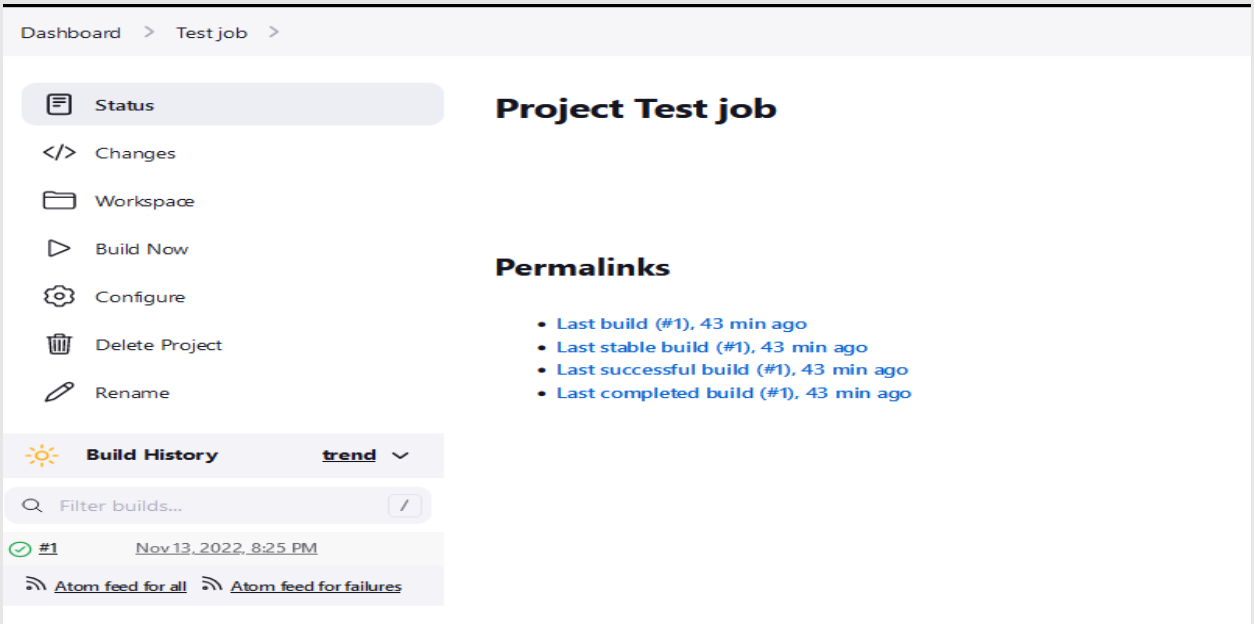
1. Build Triggers
2. Build after other projects are built
3. Write compile job, this is the first job we make it
4. Trigger even if the build fails
5. Save



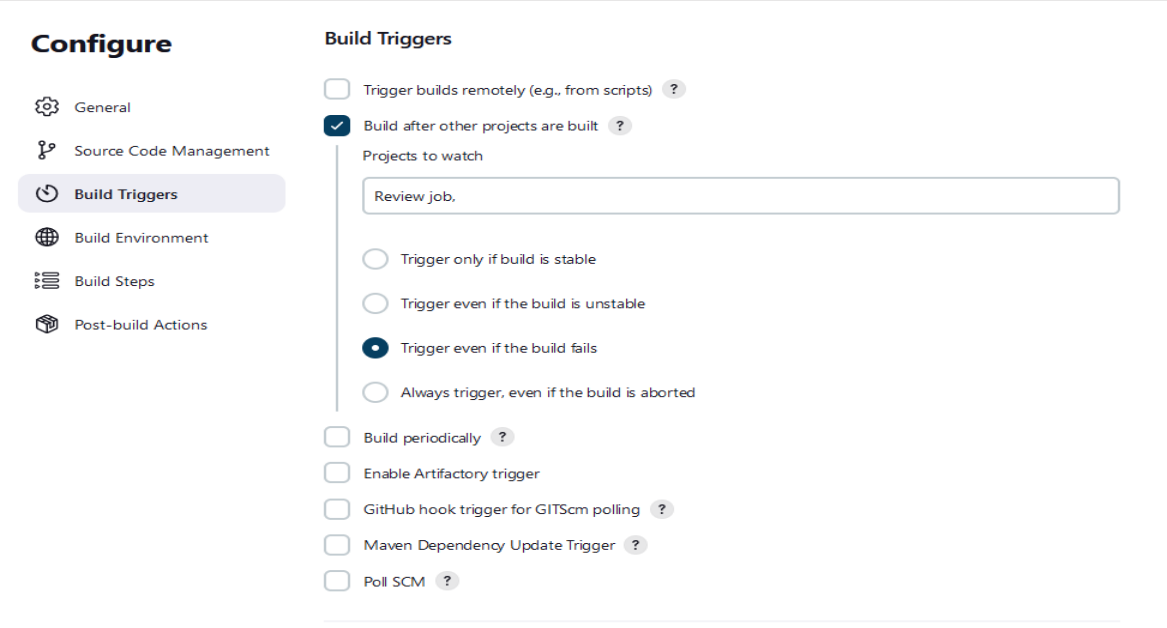
- Now we will go to test job



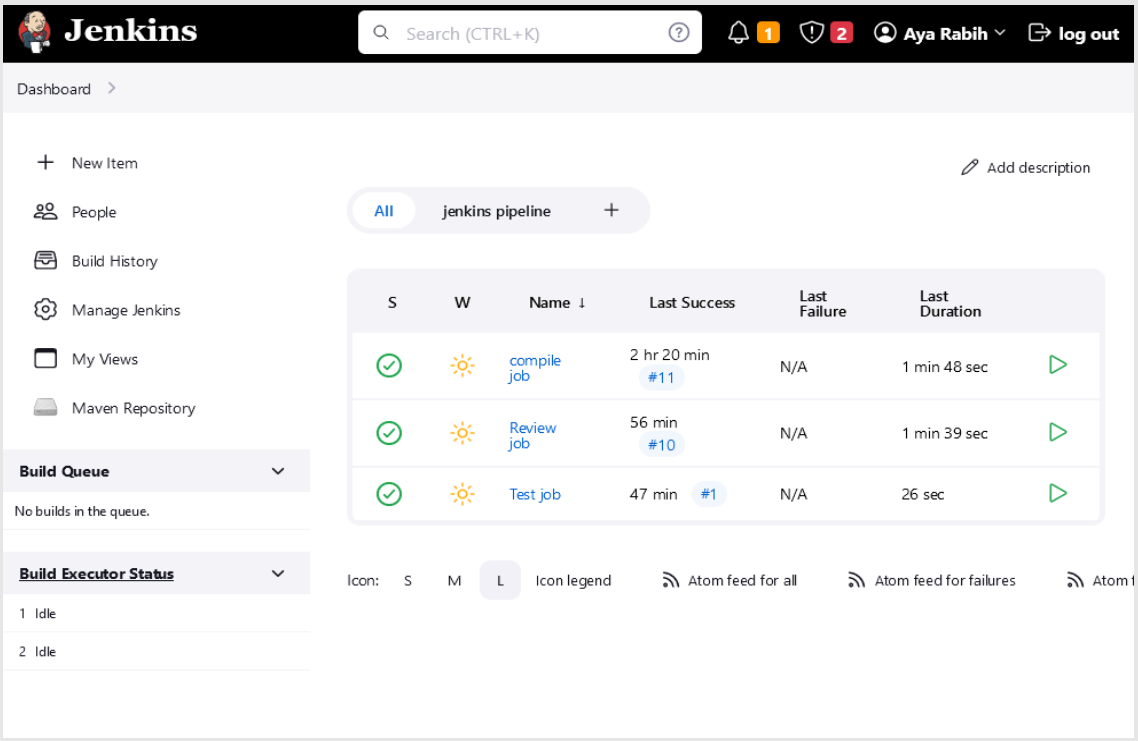
- Now test job done



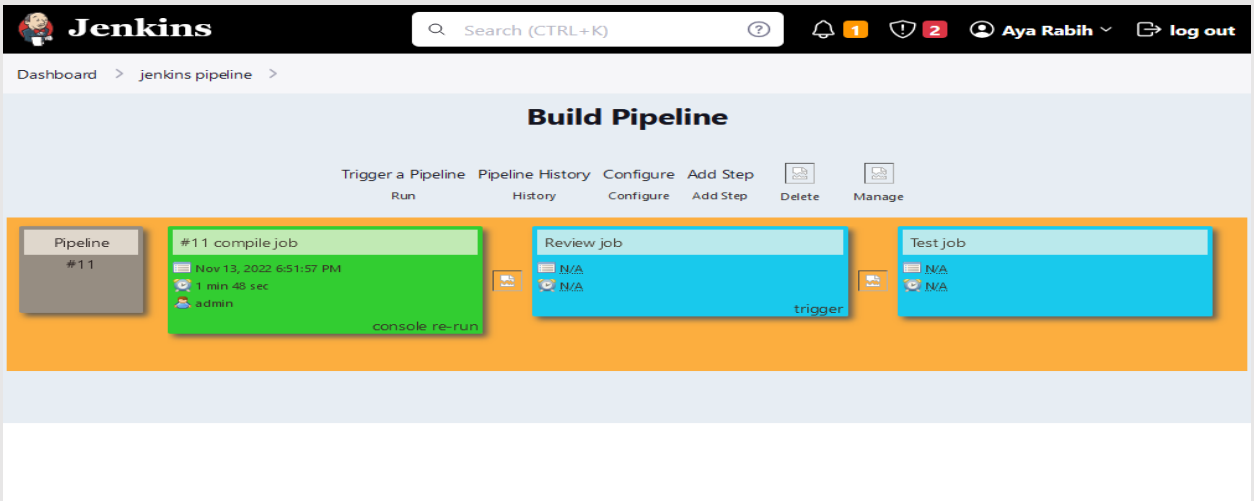
1. Build Triggers
2. Build after other projects are built
3. Write your second job Review job,
4. Trigger even if the build fails
5. Save



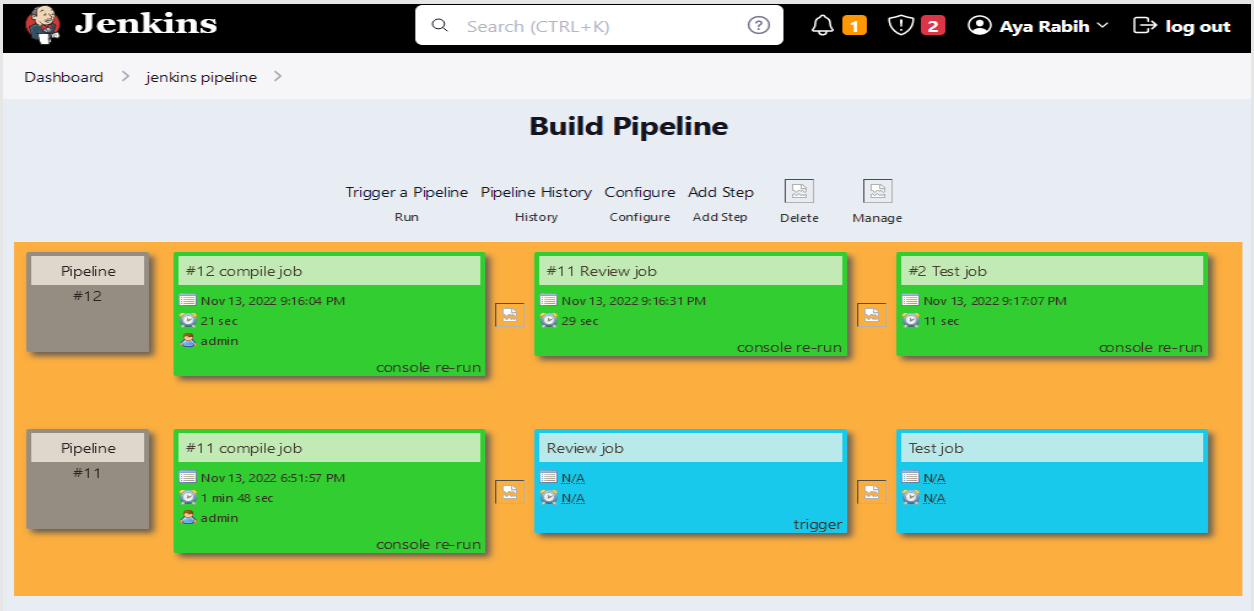
- Now let's see my pipeline from dashboard
- Click to Jenkins pipeline



❖ Now we have all steps running



❖ now all steps done



❖ all things perfect now