

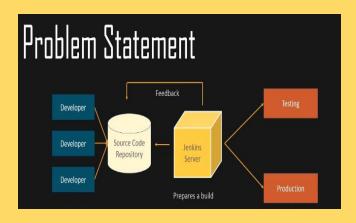
Project: continuous integration pipeline using Jenkins

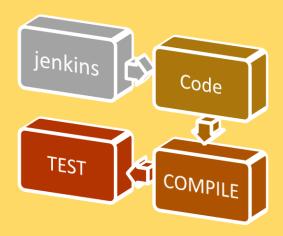
prepared by **Aya Rabih**





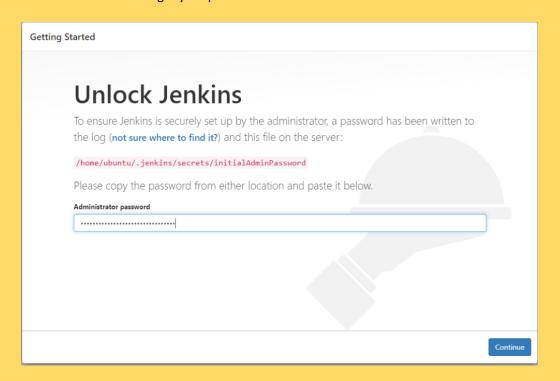
What is our plan?



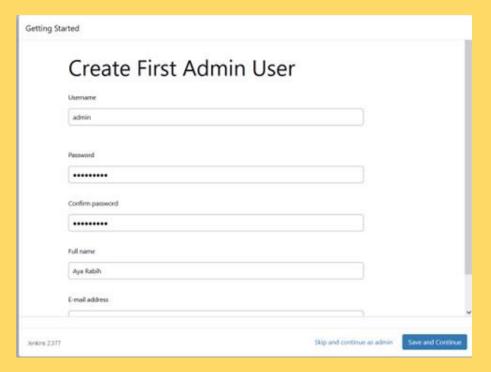


Step 1: install Jenkins

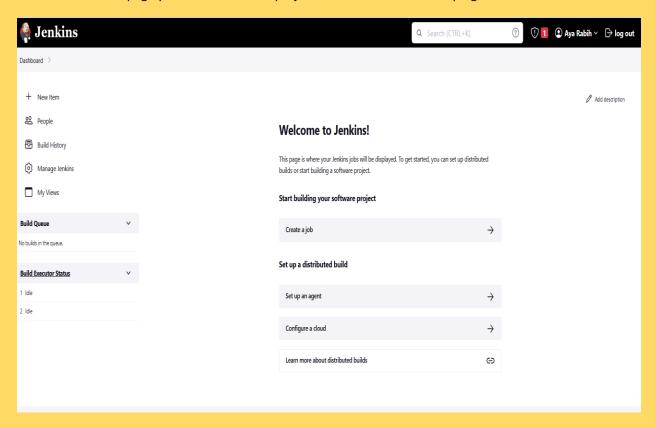
- ❖ We will start with Jenkins install
- You should have java version 11 or 16 in pc
- I will use windows by the way OS in URL https://localhost:9090/
- You will download junkies and start to install it and when you complete to install it will open you page to with address to get your password authentication



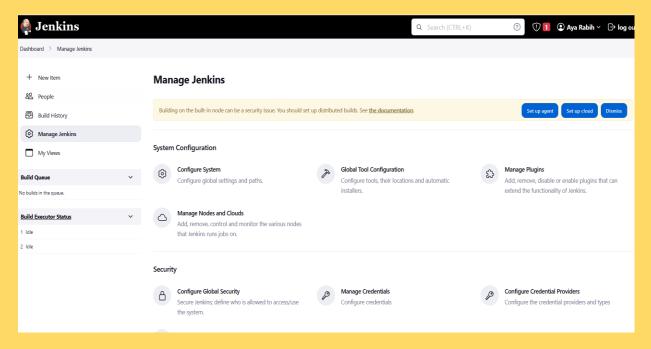
Don't worry you will change password in this steps



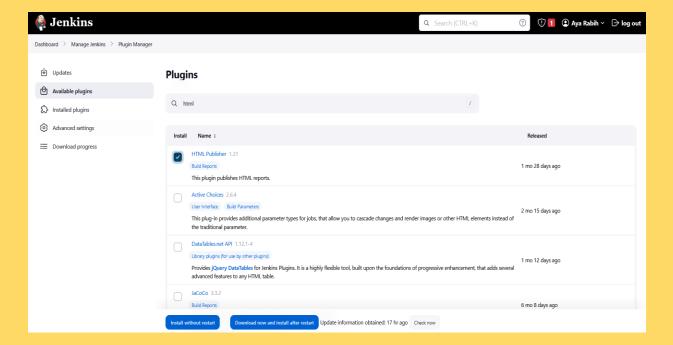
This is the first page you will see it in our project we need to install html plugins



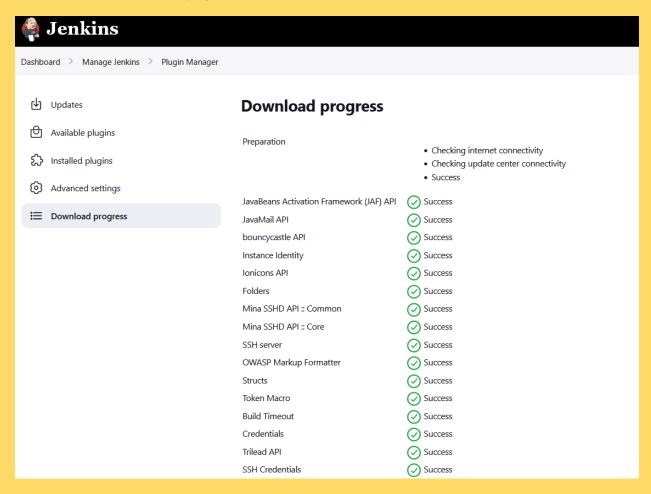
- 1. click to mange jenkins
- 2. click to mange plugins



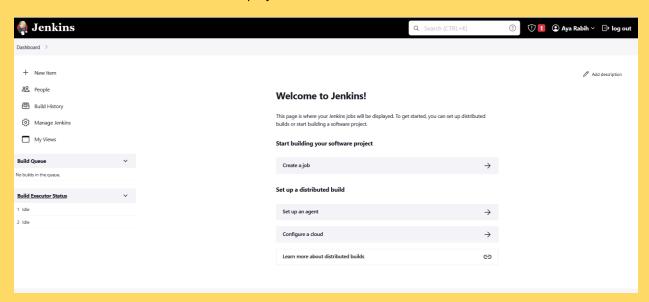
- 1. click to available plagins
- 2. write html
- 3. Click to install without restart



Now it will install all html plugins

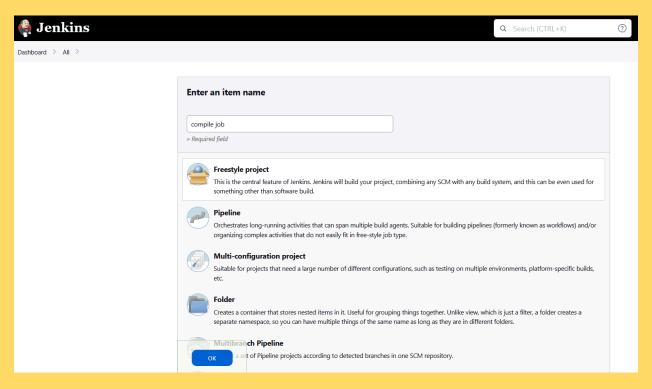


We will create new item to start our project

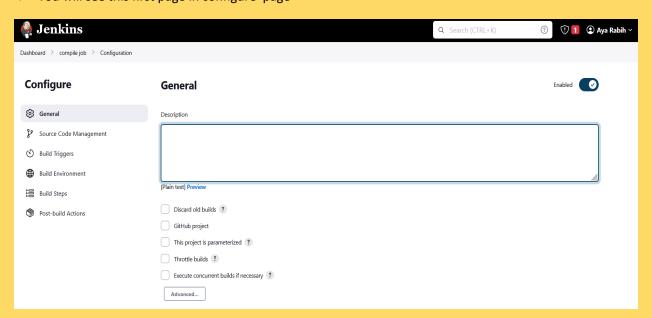


Step 2: create compile job

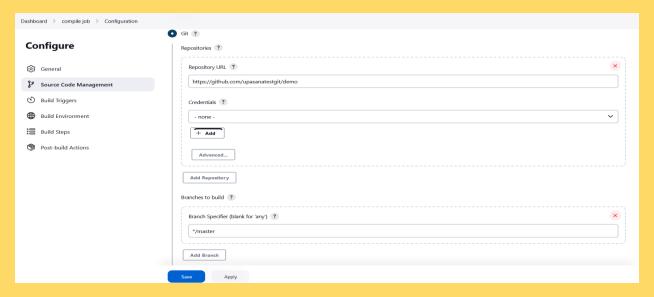
- 1. We will name our project compile job or any thing you wanna
- 2. choice freestyle project
- 3. Ok



You will see this first page in configure page

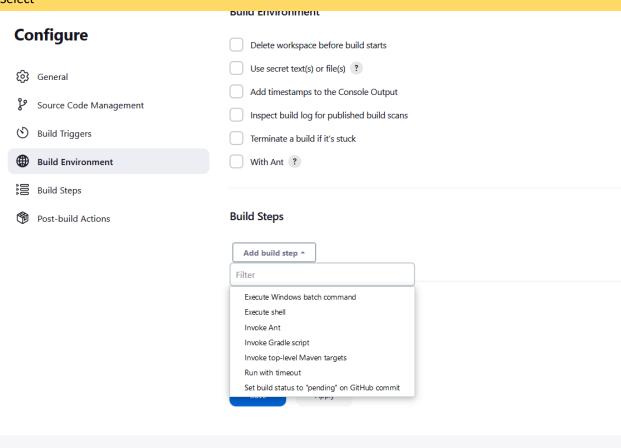


- 1. https://github.com/upasanatestgit/demo
- 2. we will use this reposity to clone it in junkins



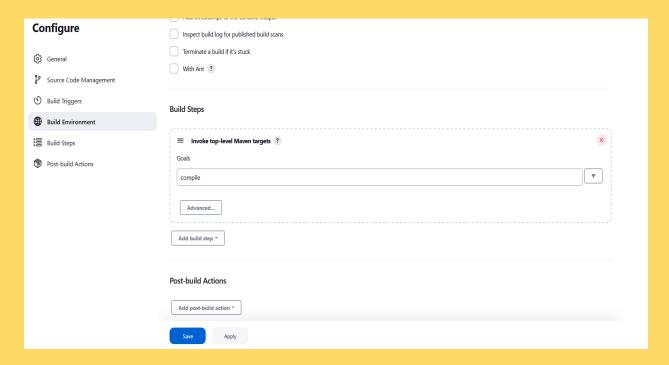
- 1. Click to build
- 2. Select invoke top-level maven targets

Select

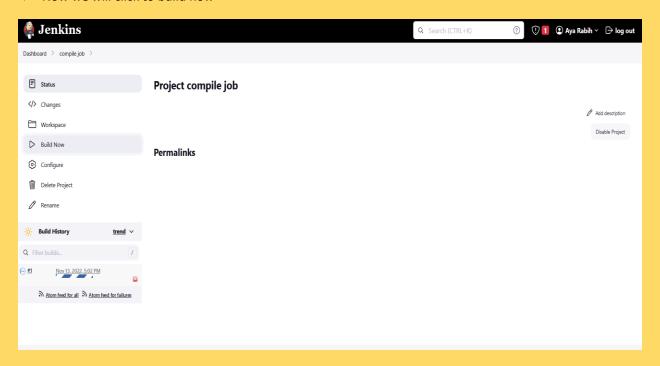


1. We will write compile

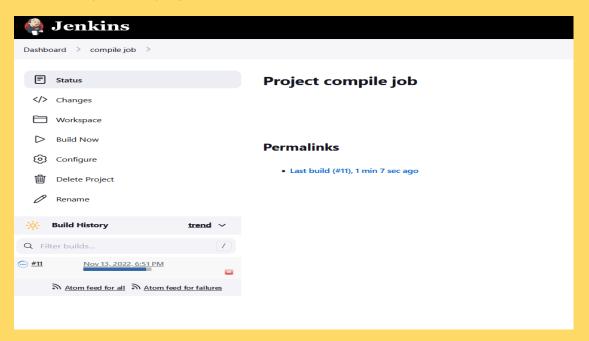
2. Save



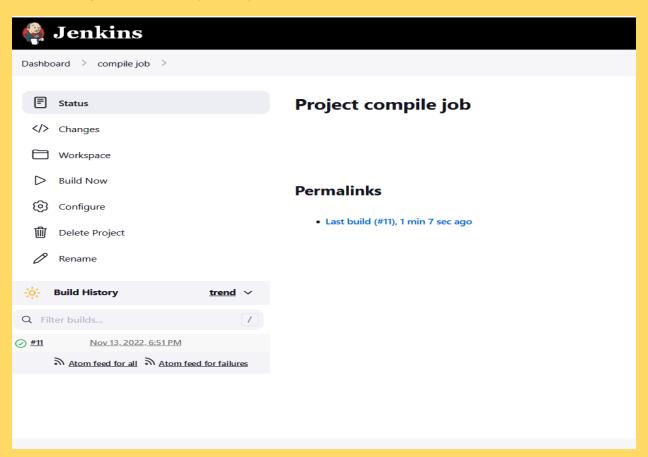
Now we will click to build now



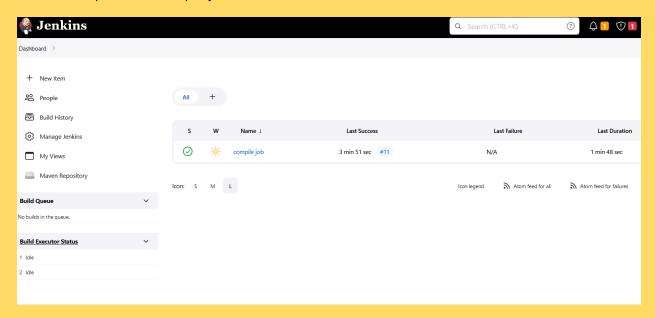
These steps run compile job



Now it is green done this step of compile the code

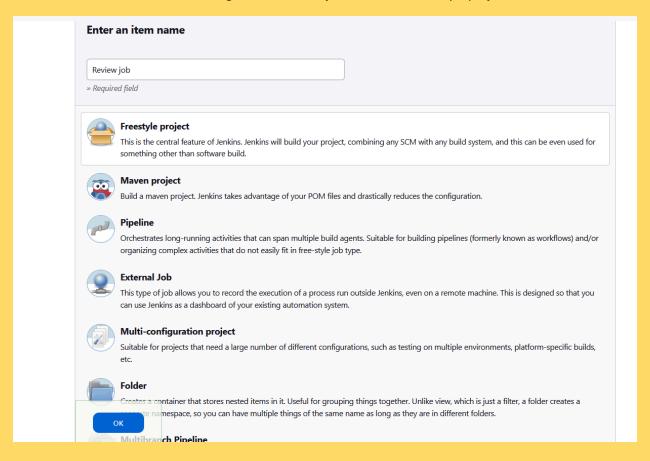


These steps show us compile job done

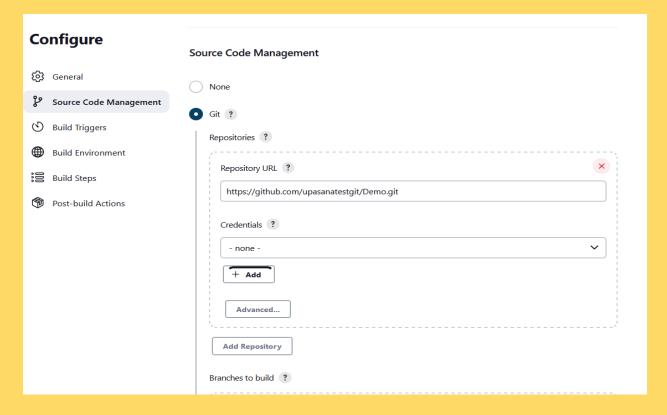


Step 3: create Review job

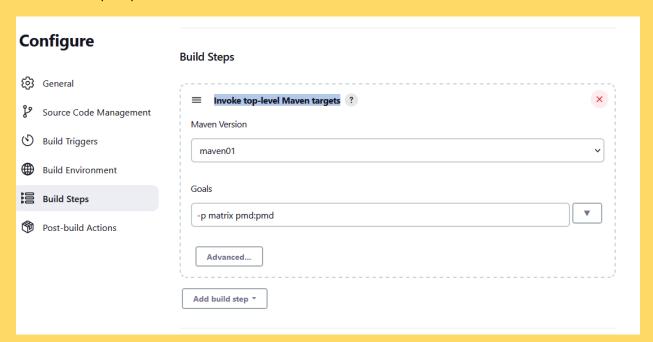
- Now we need to testing so junkies will deploy the code onto a test server for testing
- ❖ We will make new item for testing name it Review job and click to freestyle project



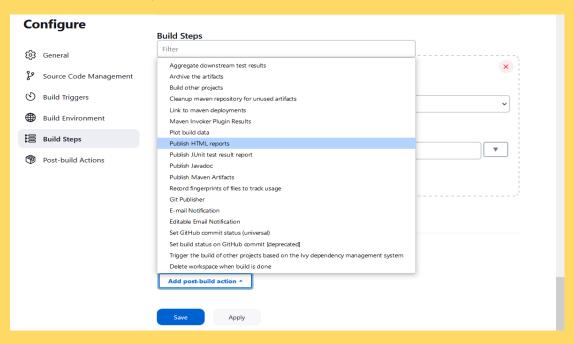
https://github.com/upasanatestgit/Demo.git



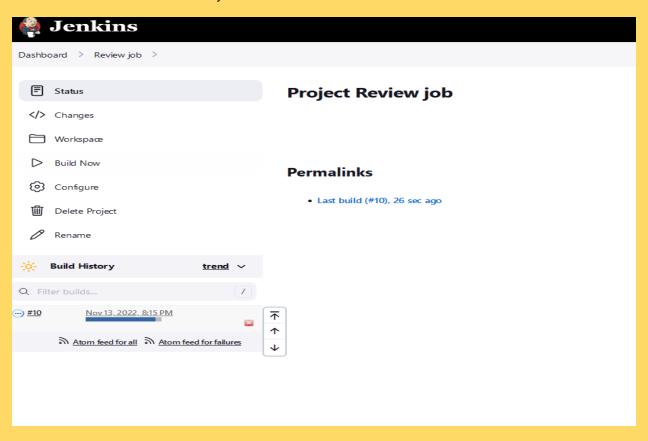
- 1. Invoke top-level Maven targets
- 2. Build Steps
- 3. -P matrix pmd:pmd



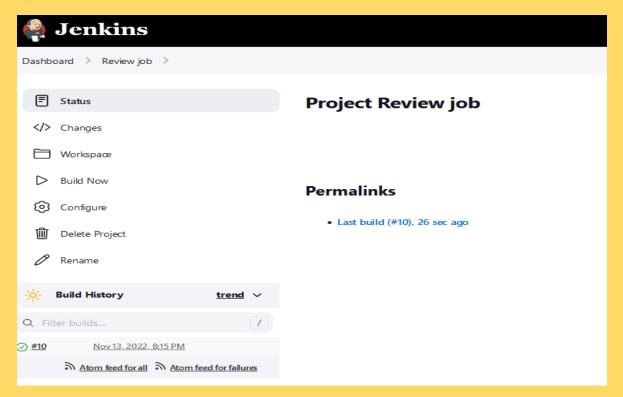
- 1. Post-build Actions
- 2. Publish HTML reports



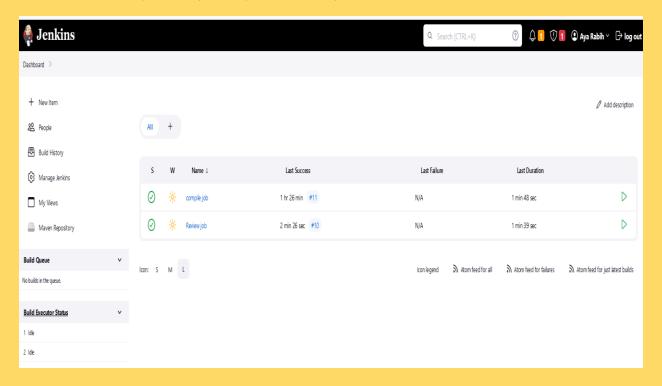
Now it will start run review job



Review job done

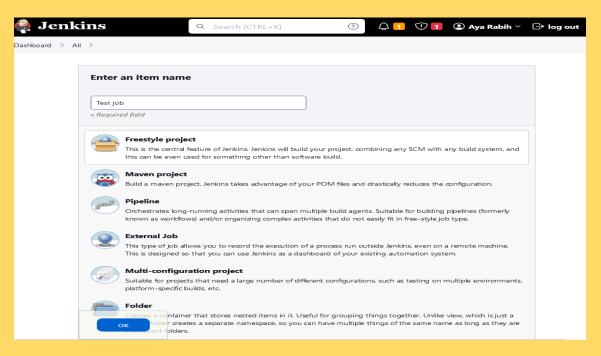


Now we complete two job compile and review job

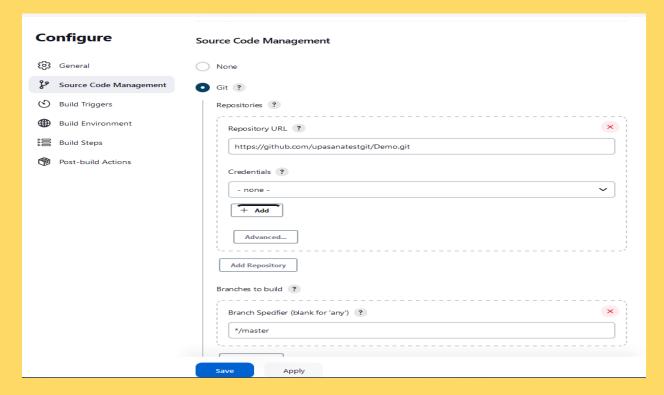


Step 4: create test job

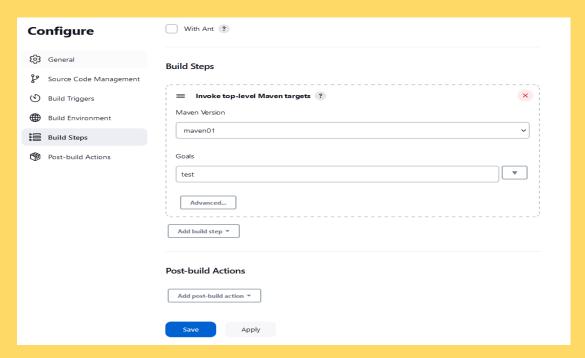
- 1. Test job
- 2. Freestyle project
- 3. ok



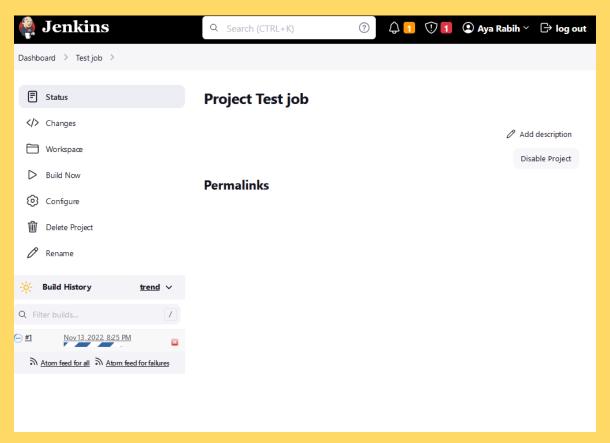
https://github.com/upasanatestgit/Demo.git



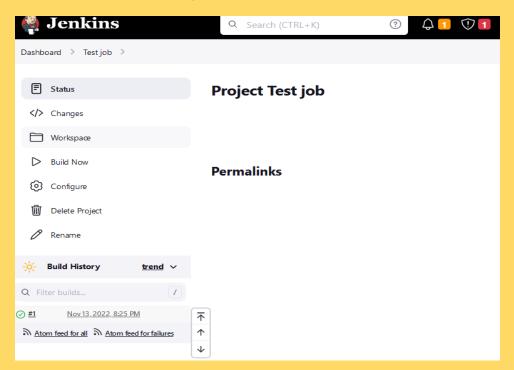
- 1. Build Steps
- 2. Invoke top-level Maven targets ?
- 3. Test



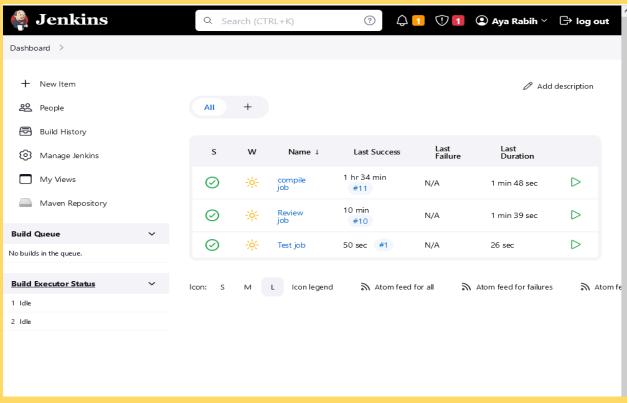
Now test job running



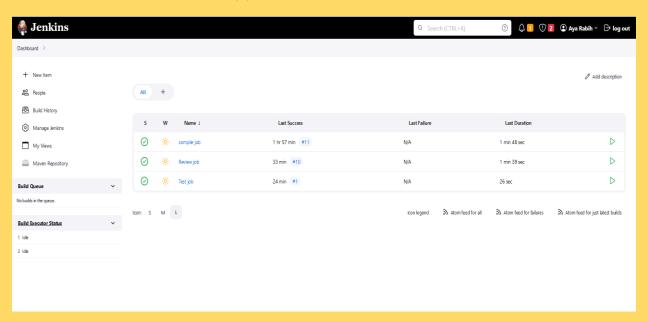
Now it is done for test job



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

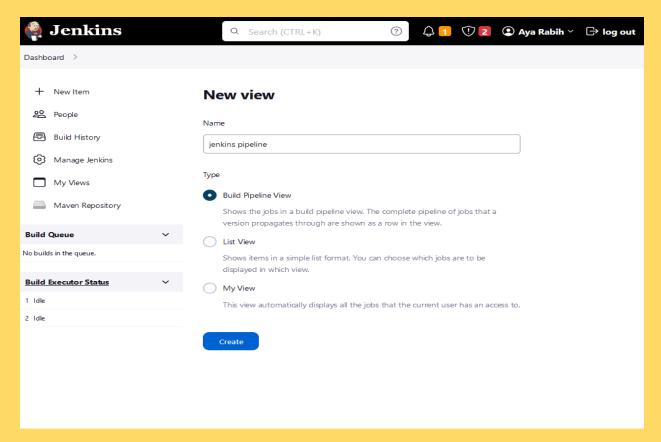


❖ Now we will click to + to make pipeline



Step 5: create Jenkins pipeline

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



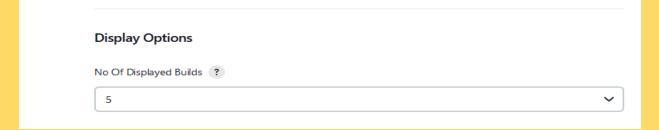
we will start with compile job



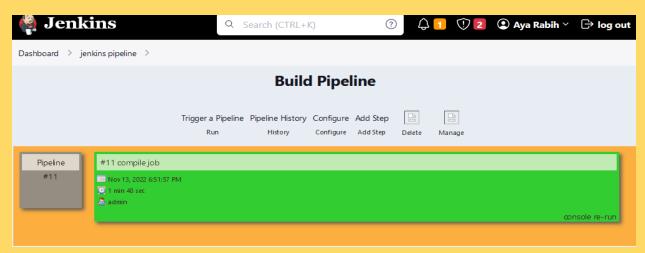
❖ Select the No Of Displayed Builds from 1 to 5



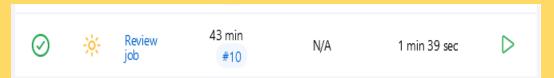
Like that



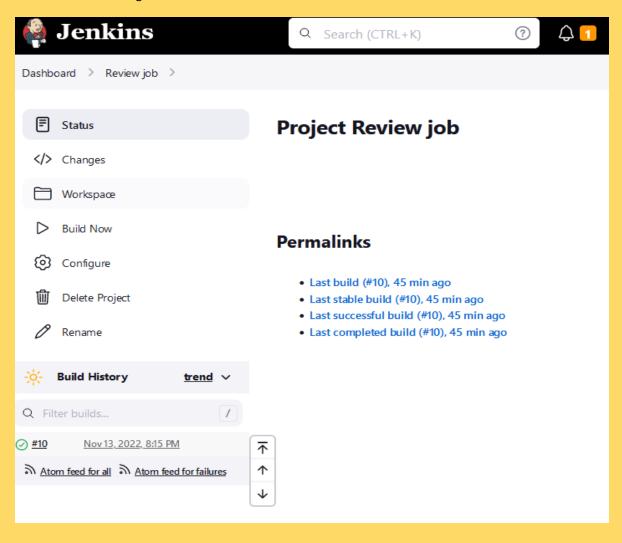
- Now click okay
- Now done for compile job in pipeline



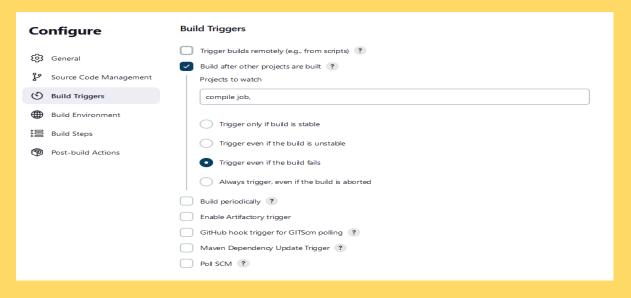
Now we will go to Review job



Click to configure



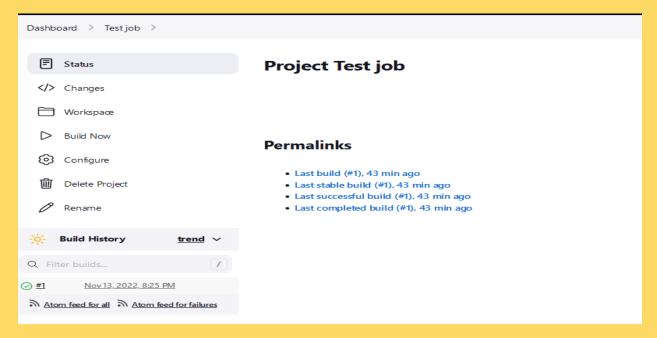
- Now we will click to
- 1. Build Triggers
- 2. Build after other projects are built
- 3. Write compile job, this is the first job we make it
- 4. Trigger even if the build fails
- 5. Save



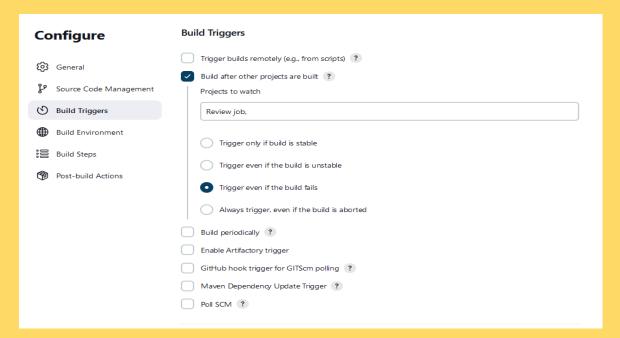
Now we will go to test job



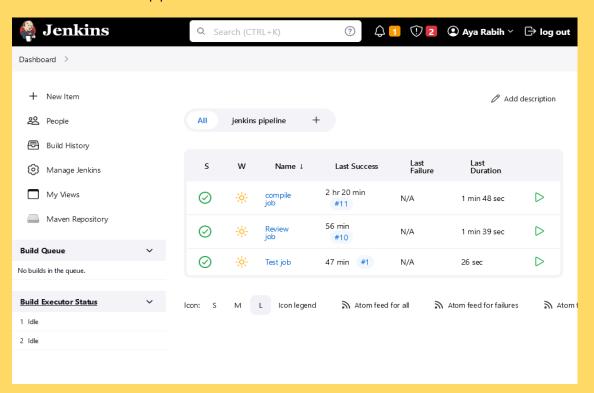
Now test job done



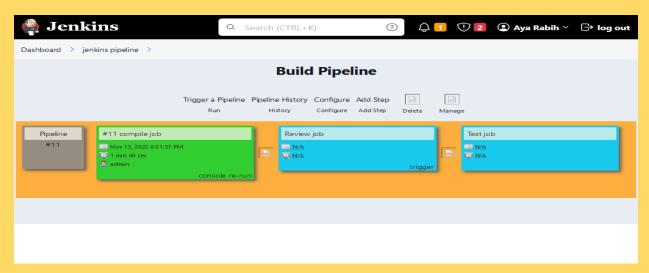
- 1. Build Triggers
- 2. Build after other projects are built
- 3. Write your second job Review job,
- 4. Trigger even if the build fails
- 5. Save



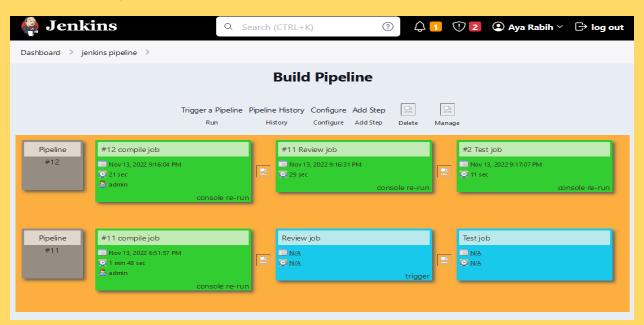
- Now let's see my pipeline from dashboard
- Click to Jenkins pipeline



Now we have all steps running



now all steps done



all things perfect now