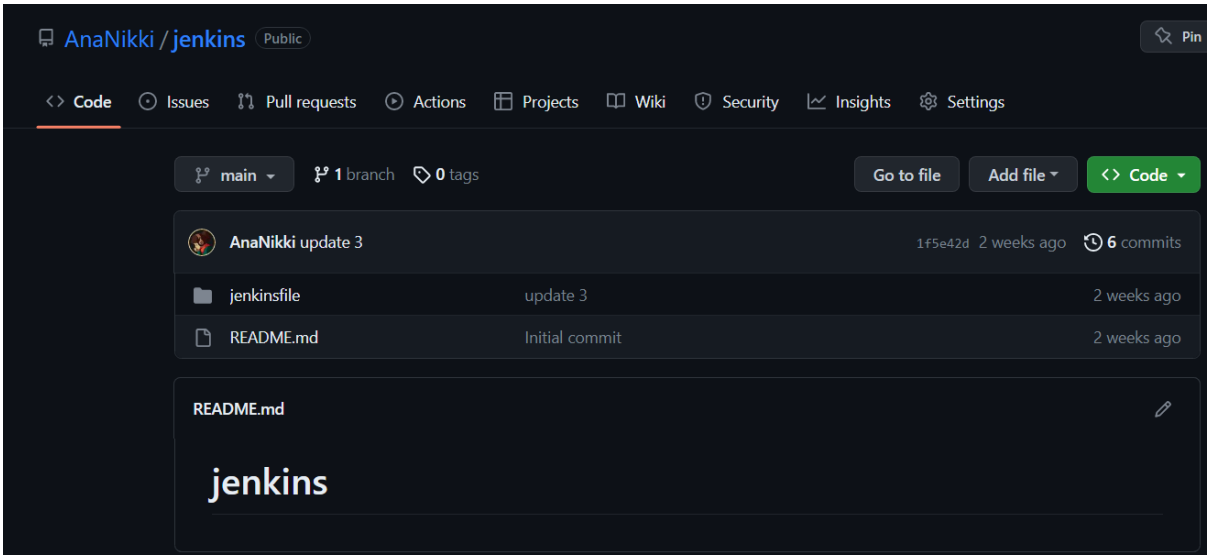
Jenkins

For this exercise, we have Jenkins pipelines. We will see here how to write a basic Jenkins “Hello world” pipeline. But first let’s see what Jenkins pipeline is. Jenkins is basically a sequence of steps that are linked together. There are two ways by which we can define a pipeline:

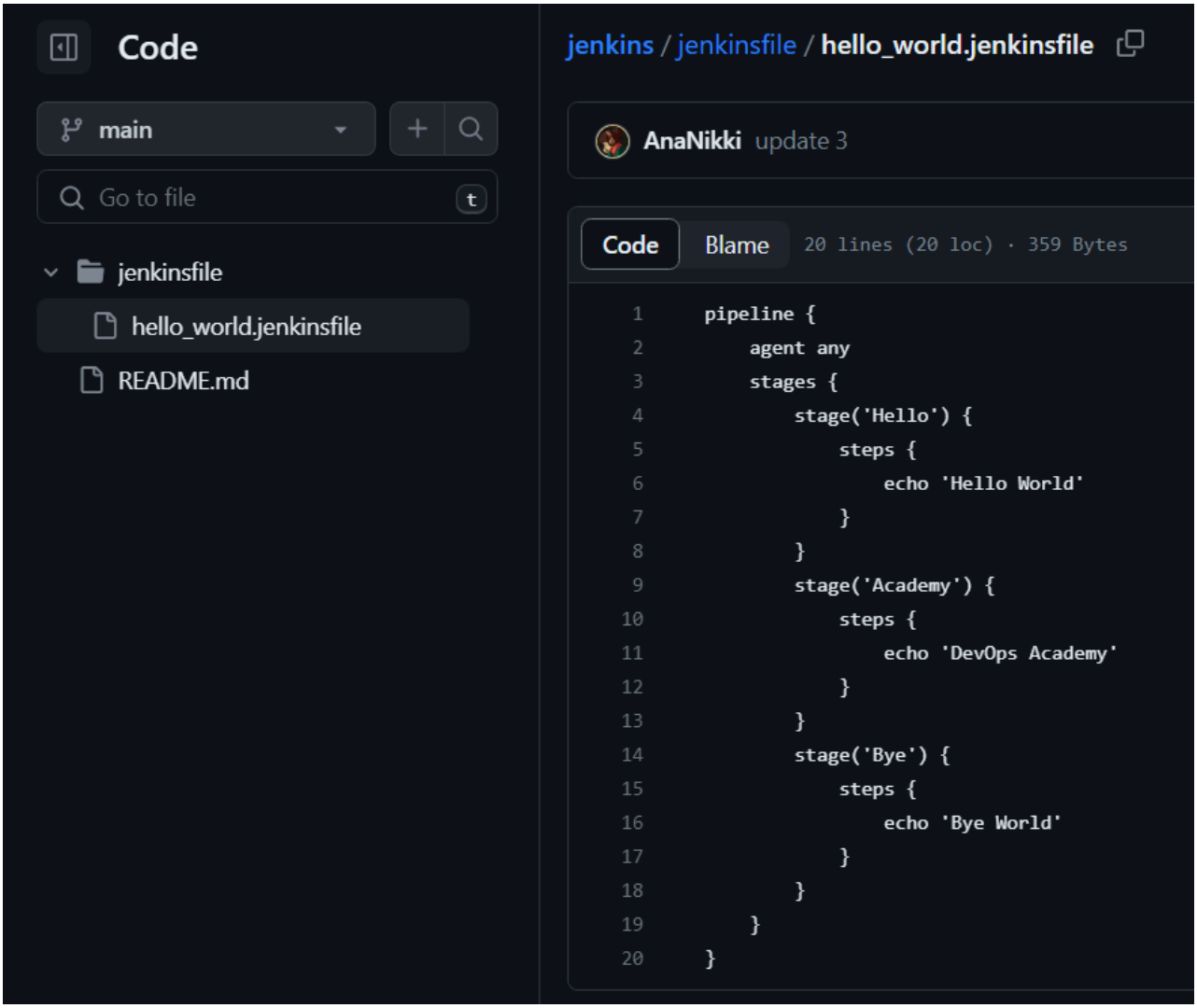
- Scripted syntax
- Declarative syntax

But most of the time we have our code in GitHub and we need CI/CD tool to pull the code from the version control and perform CI/CD tasks. Here we will define the pipeline in a Jenkins file and upload that file into GitHub. We will see how to write Jenkinsfile and run the Jenkins by specifying the Jenkinsfile .

For this purpose, we will create a GitHub repository for this Jenkins exercise. In the repository we will make a directory named jenkinsfile where we will put our hello_world.jenkinsfile.



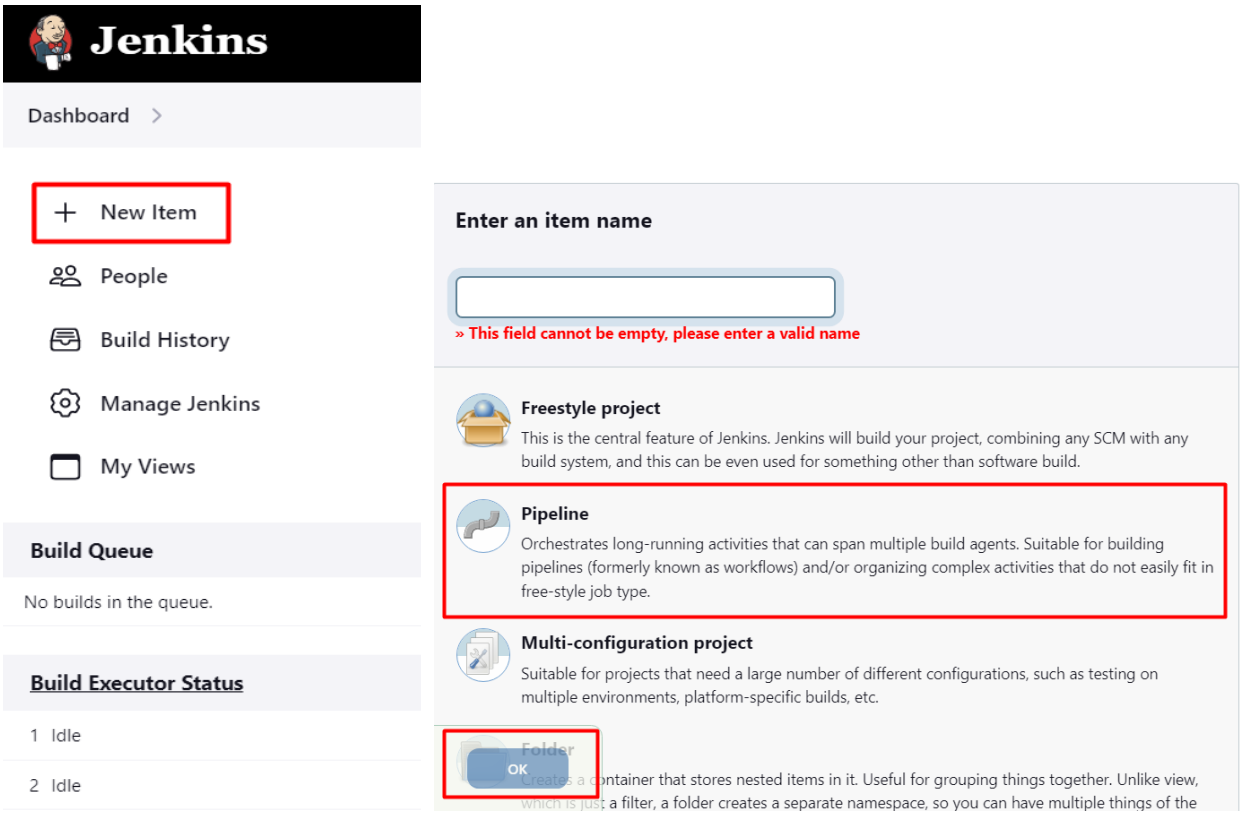
This is how our Jenkinsfile looks like:



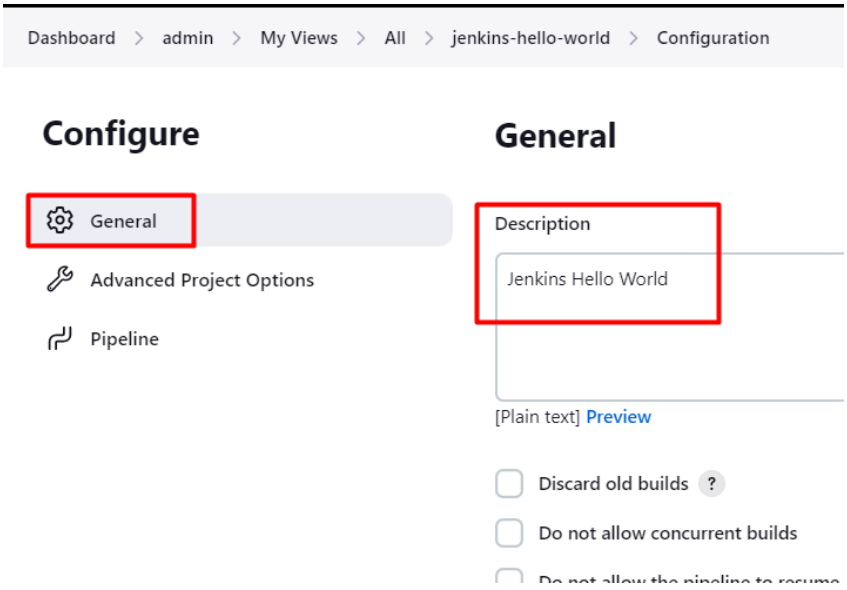
In this code we have:

- pipeline – this is the mandatory block.
- Agent – this is where the Jenkins build job should run. Here we have selected agents as any. Jenkins supports a wide variety of agents.
- Stages/stage – this block consists of different executable stage blocks.
- Steps – this block consists of an actual operation that needs to be performed inside Jenkins.
  In our example we print “Hello Word”, “DevOps Academy”, “Bye World”

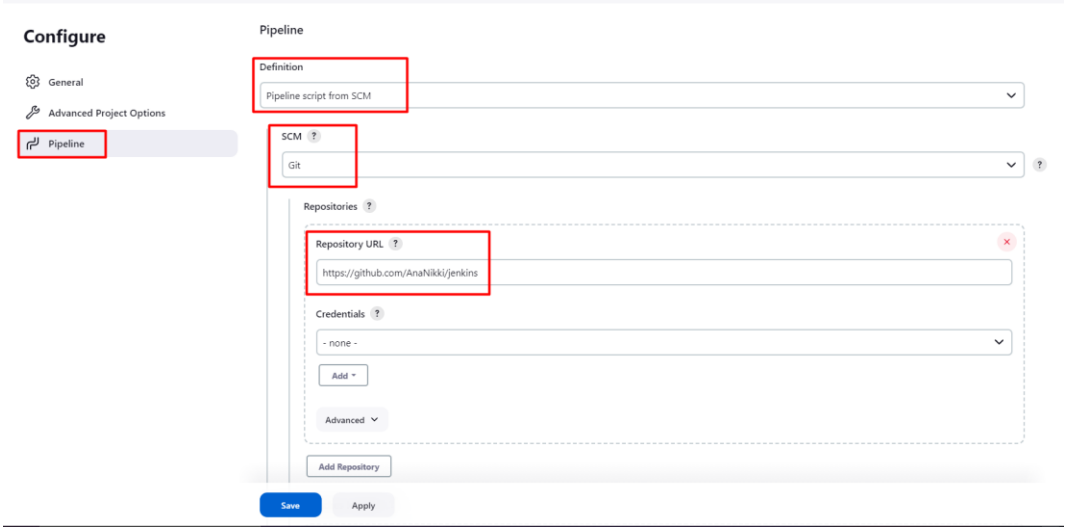
Next, we will create a Jenkins pipeline. On the Jenkins dashboard we click on New Item. When we click on New Item, we need to Enter an Item name, select Pipeline and click ok.

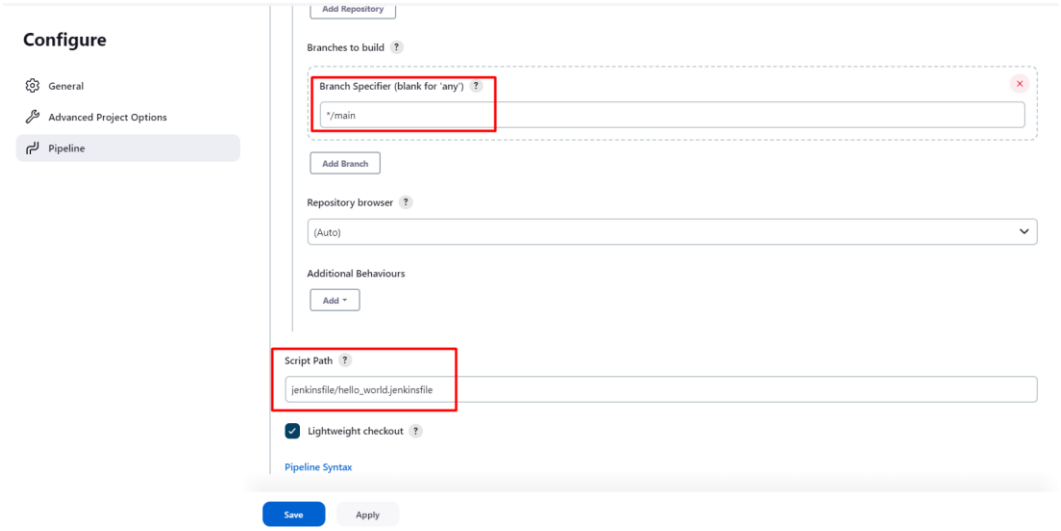


Next on the General tab we add a short description.

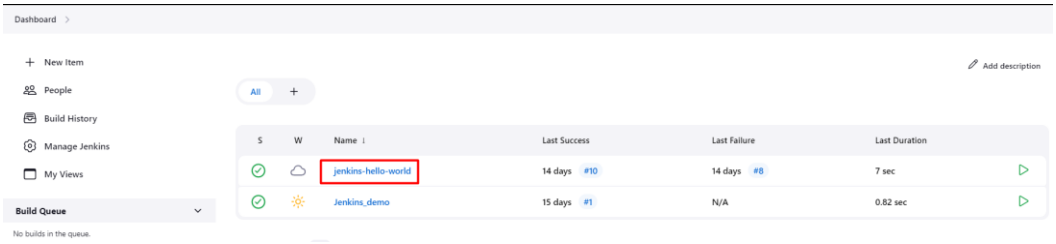


After that we go to Pipeline tab and then select definition as Pipeline script from SCM. Under SCM we select Git and pass the GitHub repository URL and branch name. Next we add the script path from our GitHub and click on Save to save the pipline.

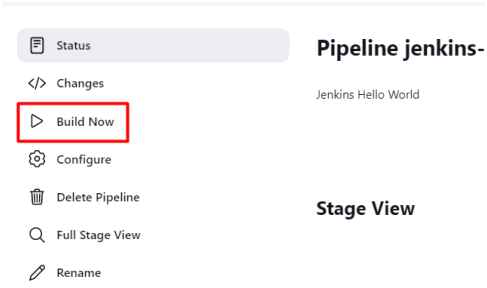




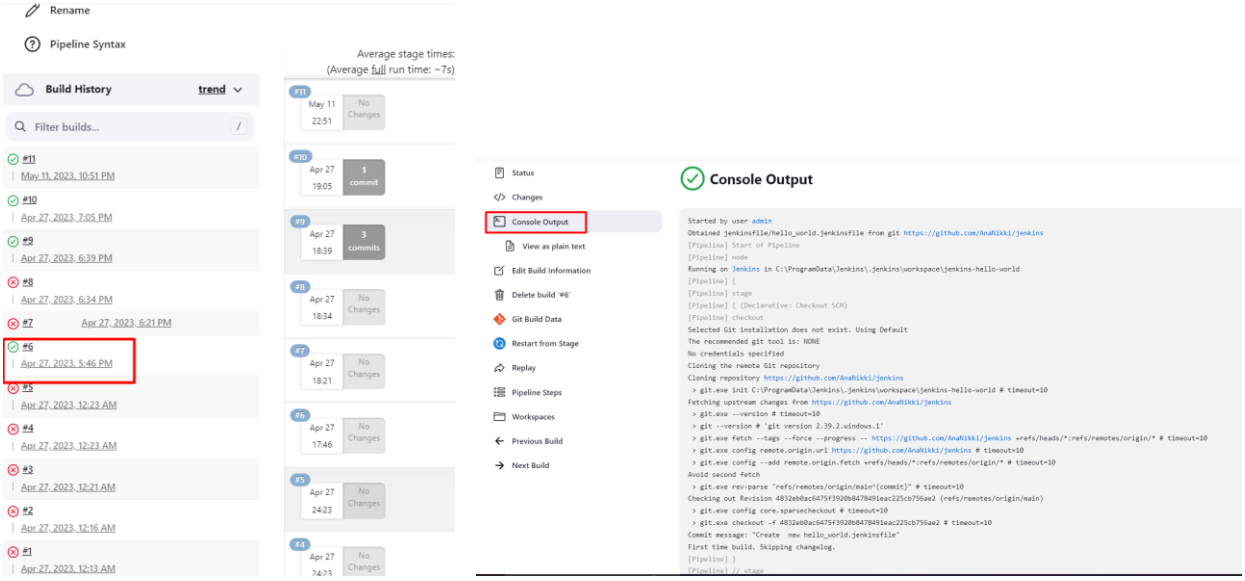
After we save the pipeline, we go to Dashboard and select our pipeline.



Then we select Build Now.



And with that we build our hello-world pipeline. As we can see from the picture below, we had many unsuccessful builds and successful ones. For our first successful build we clicked on it. On the new window we click Console Output and see the output from the build.



We can go to Status and see the Stage View.