**AIR UNIVERSITY, ISLAMABAD**

**Department of Cyber Security**

Secure Software Design & Development Lab (CY- 256L)

Lab Task-14

**Submitted to:** Sir Mahaz Khan

**Submitted by:** Mirza Shaheer Baig (231330)

**CLASS:** BSCYS-4 A

**Submitted on: 13/06/2025**

**Pre requisites:**

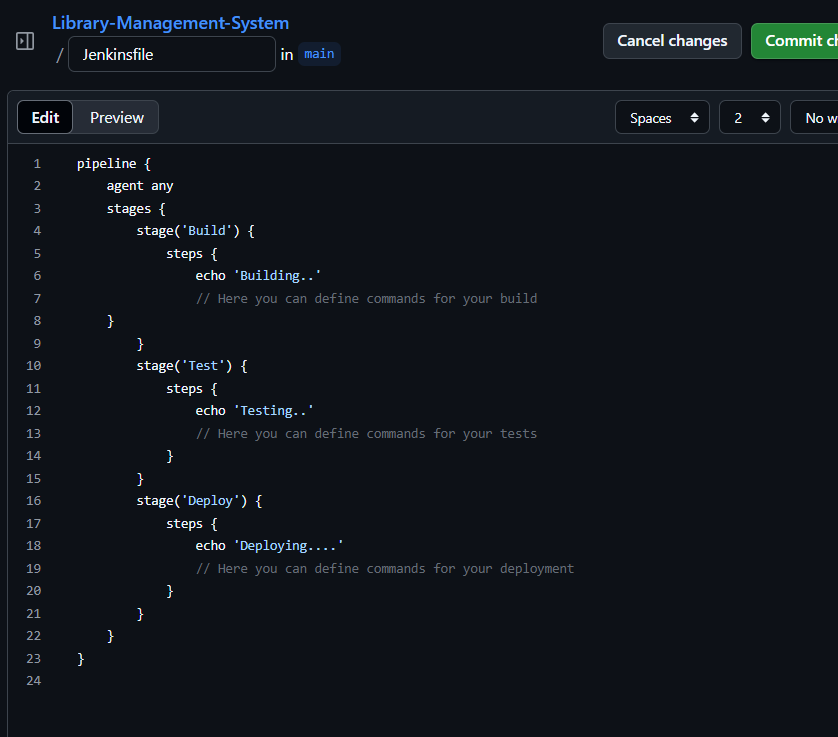
Jenkins should be installed and configured on your machine.

Now you can begin with setting up the pipeline:

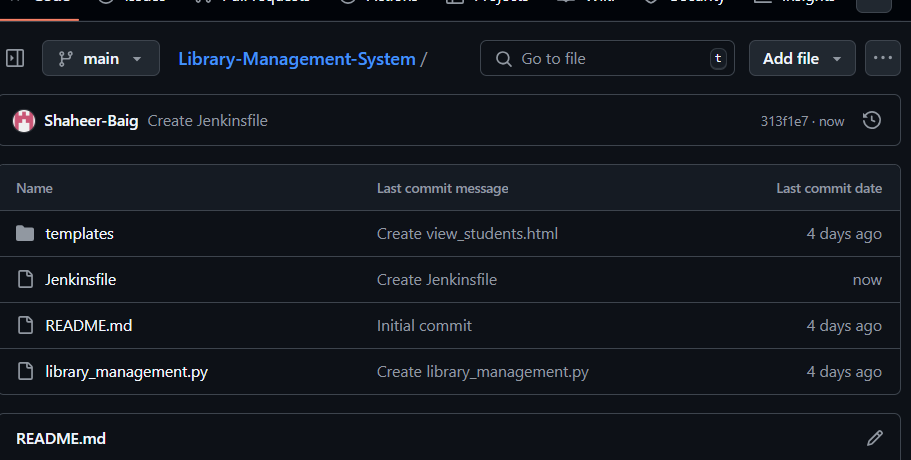
**What is Jenkins File?**

A Jenkins file is a script written in the Groovy programming language that defines the steps to be executed by a Jenkins pipeline. The pipeline is a series of steps executed in a particular order.

Make a new file named Jenkinsfile in any of your existing GitHub repository and paste the code



* Click on Commit Changes
* The file will appear in your repository:



A screenshot of a computer

AI-generated content may be incorrect.

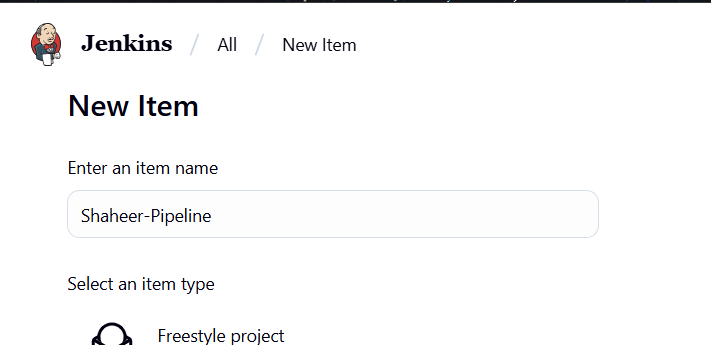
**Create Pipeline:**

Now start Jenkins

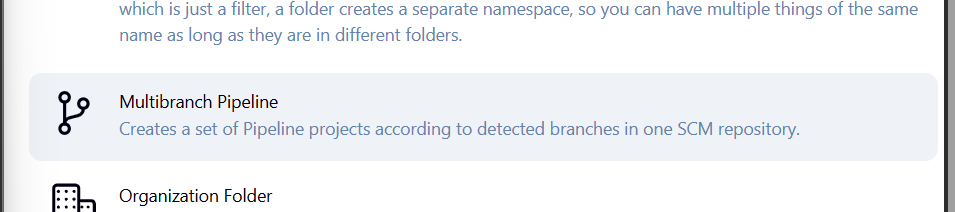
* Go to Jenkins dashboard.

Click on new item.

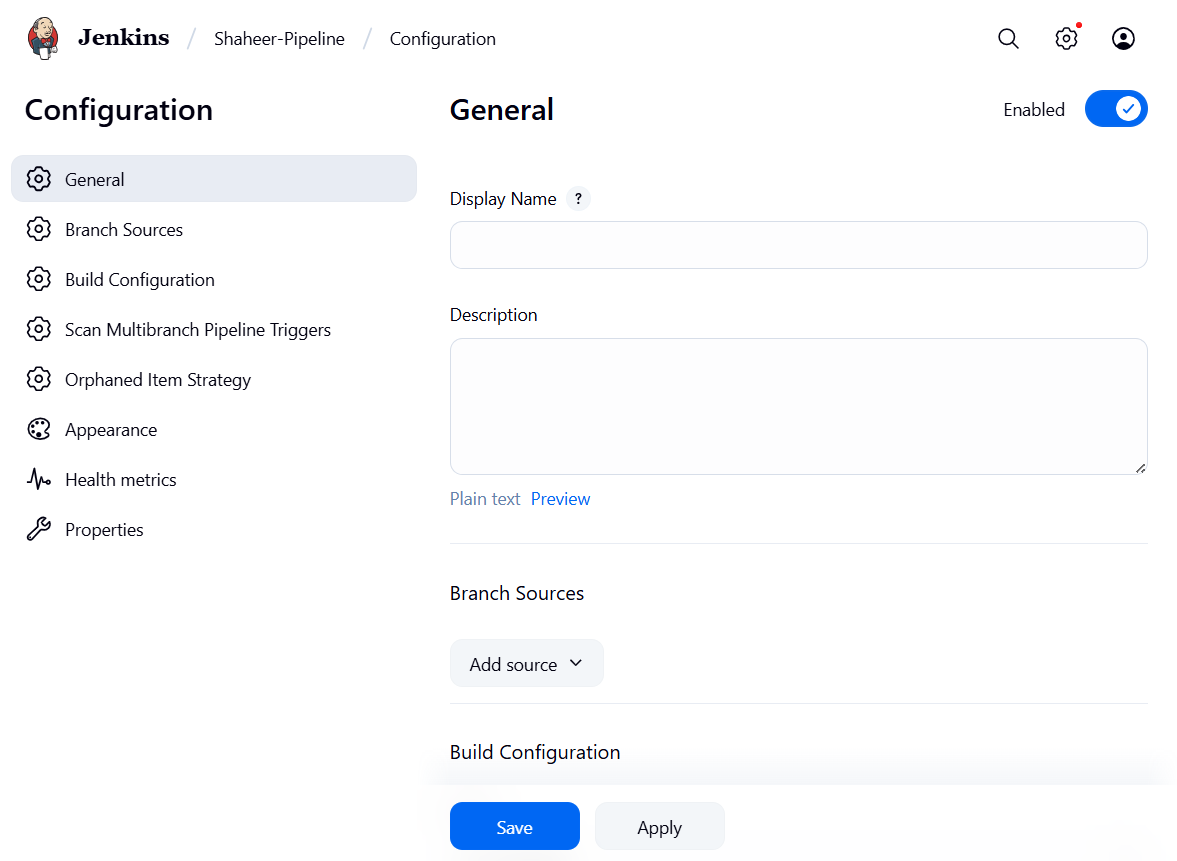
Add name of your pipeline as **myfirstpipeline.**



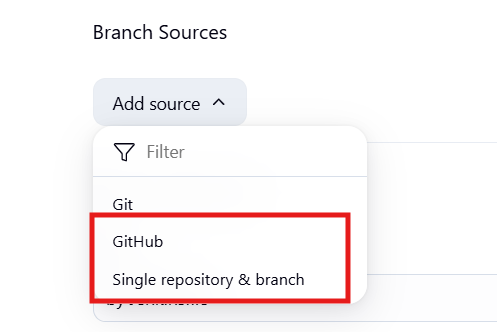
Select multibranch pipeline option:



* A new pipeline will be created:

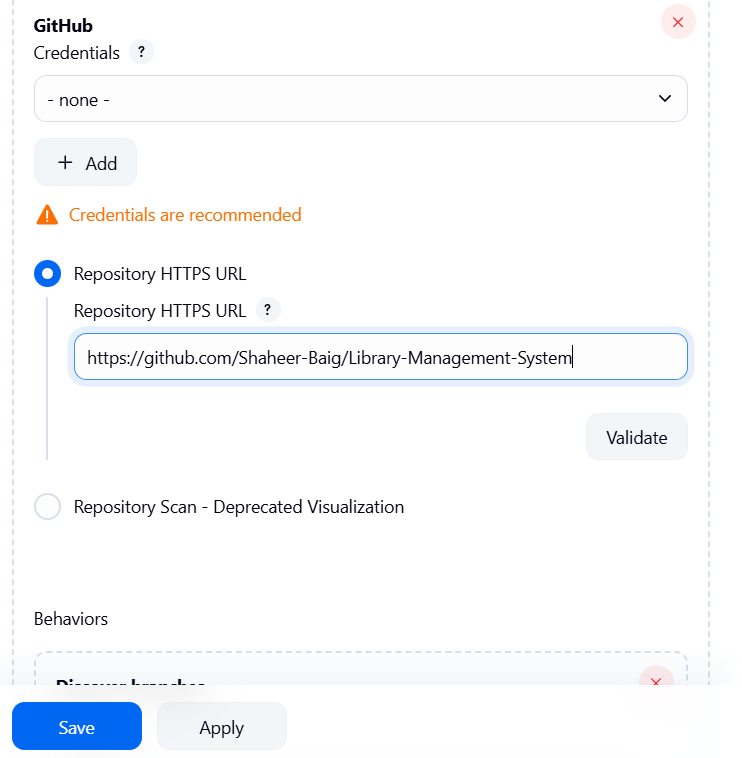


* Now click on add source option:



* Paste the link of your github repository where you created the JenkinsFile

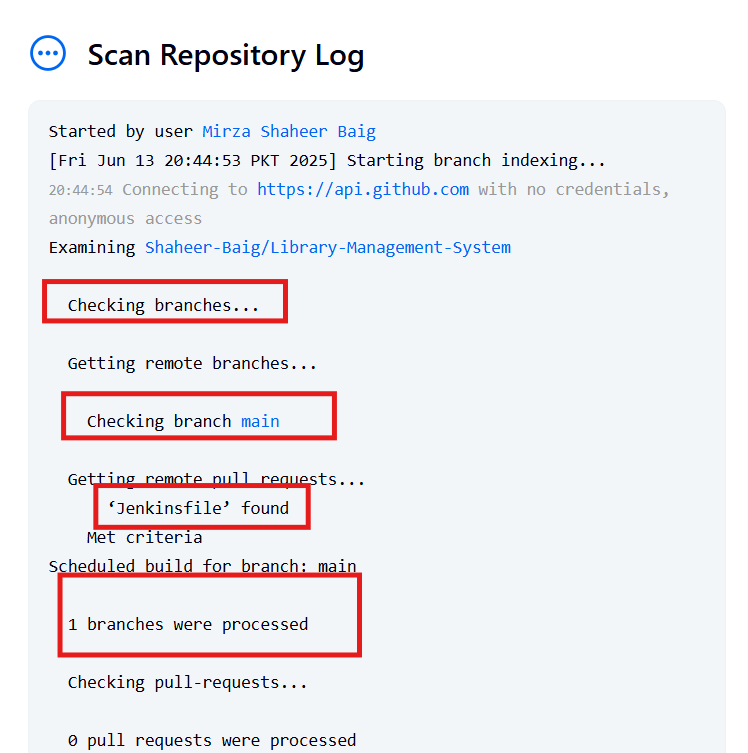
**Validate URL:**

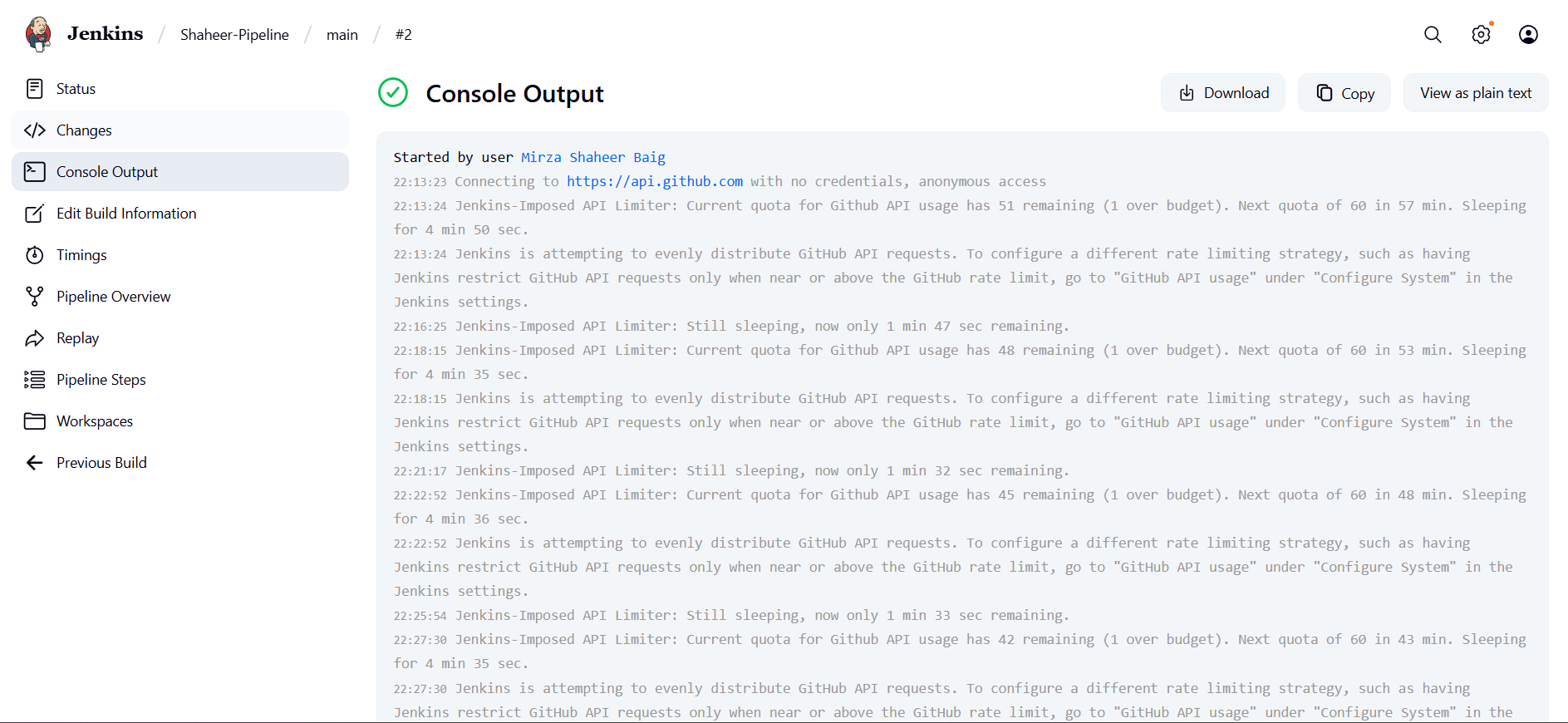


Validate the link to see if it is correct.

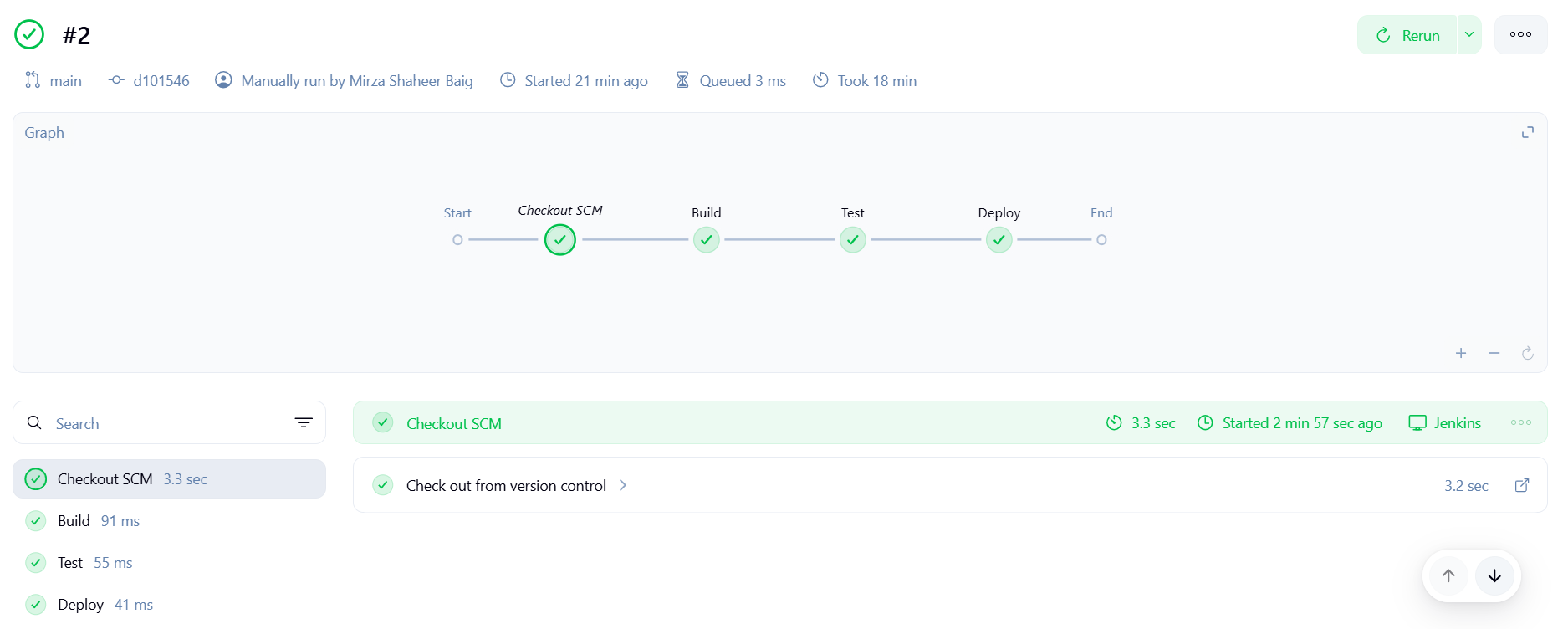
And click on **save.**

* It will start scanning the repository.
* It will scan all the branches one by one to look for Jenkinsfile
* When it is found, the scanning stops and the exits successfully.

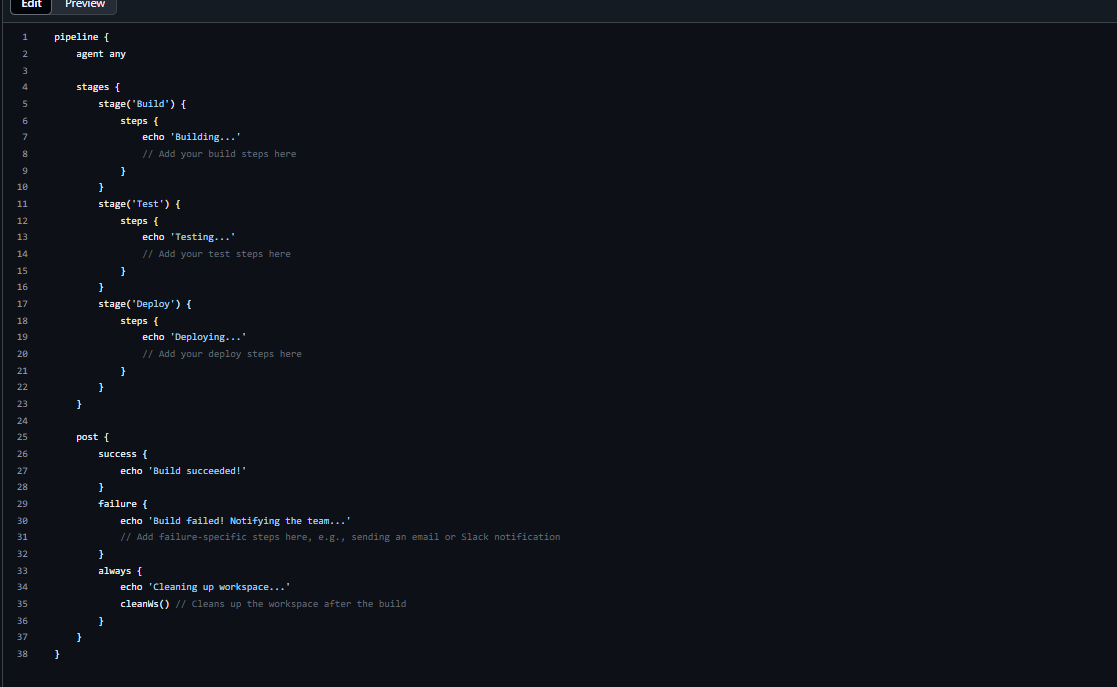


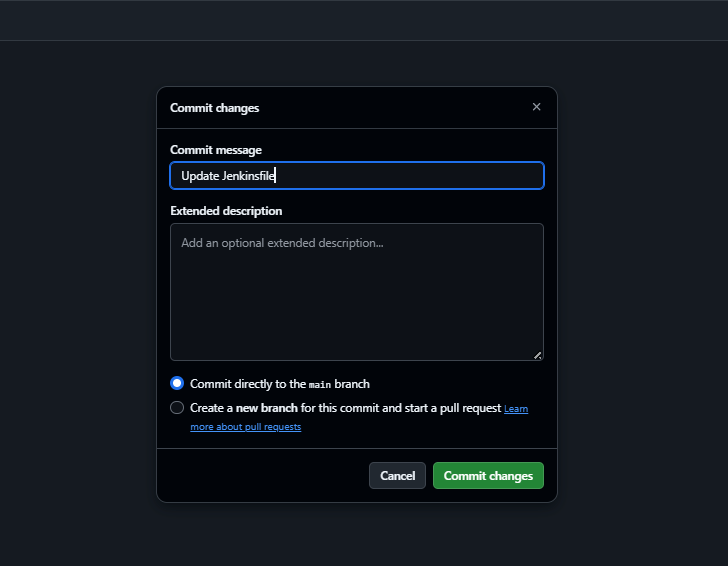


**Stages:**



**Post Build Actions:**

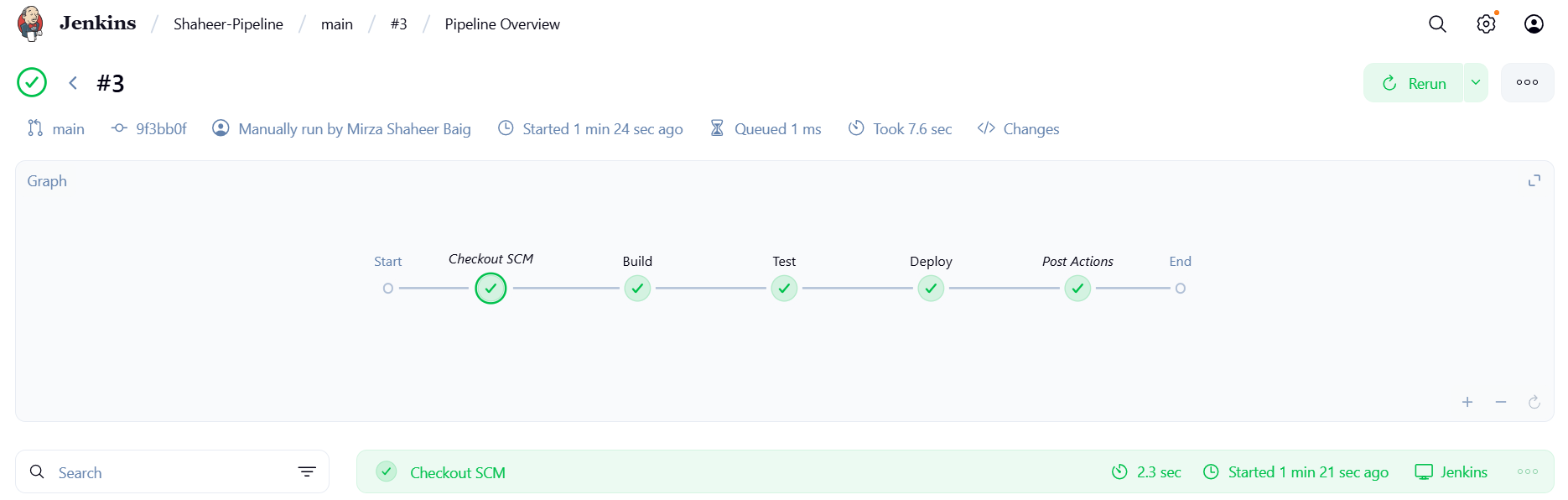




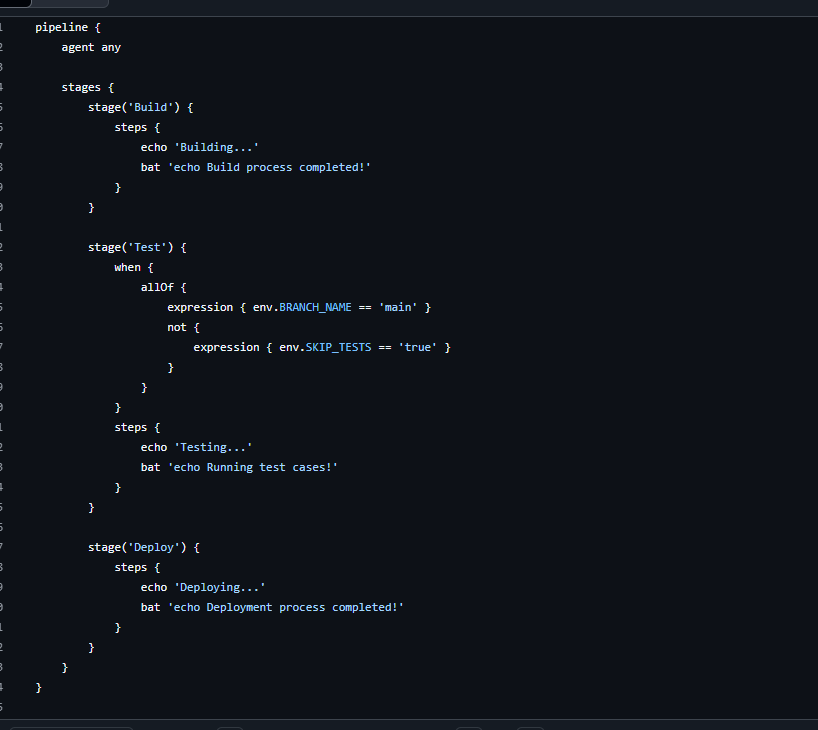
**Build Again:**

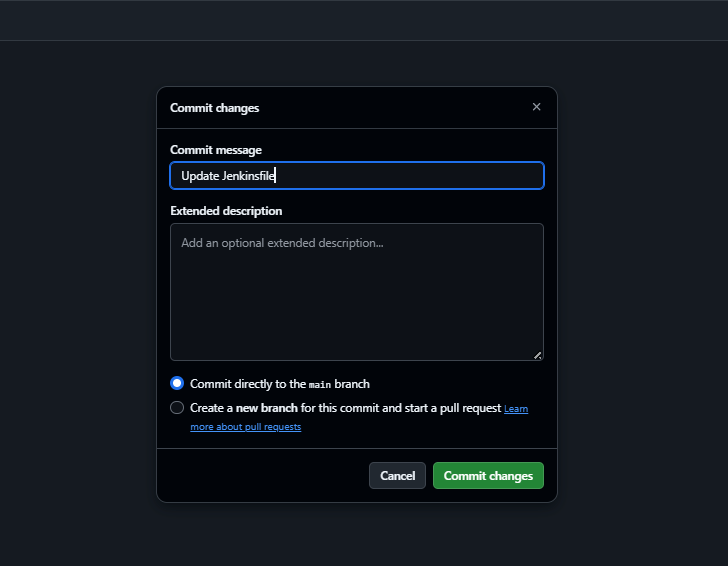


**Stages:**

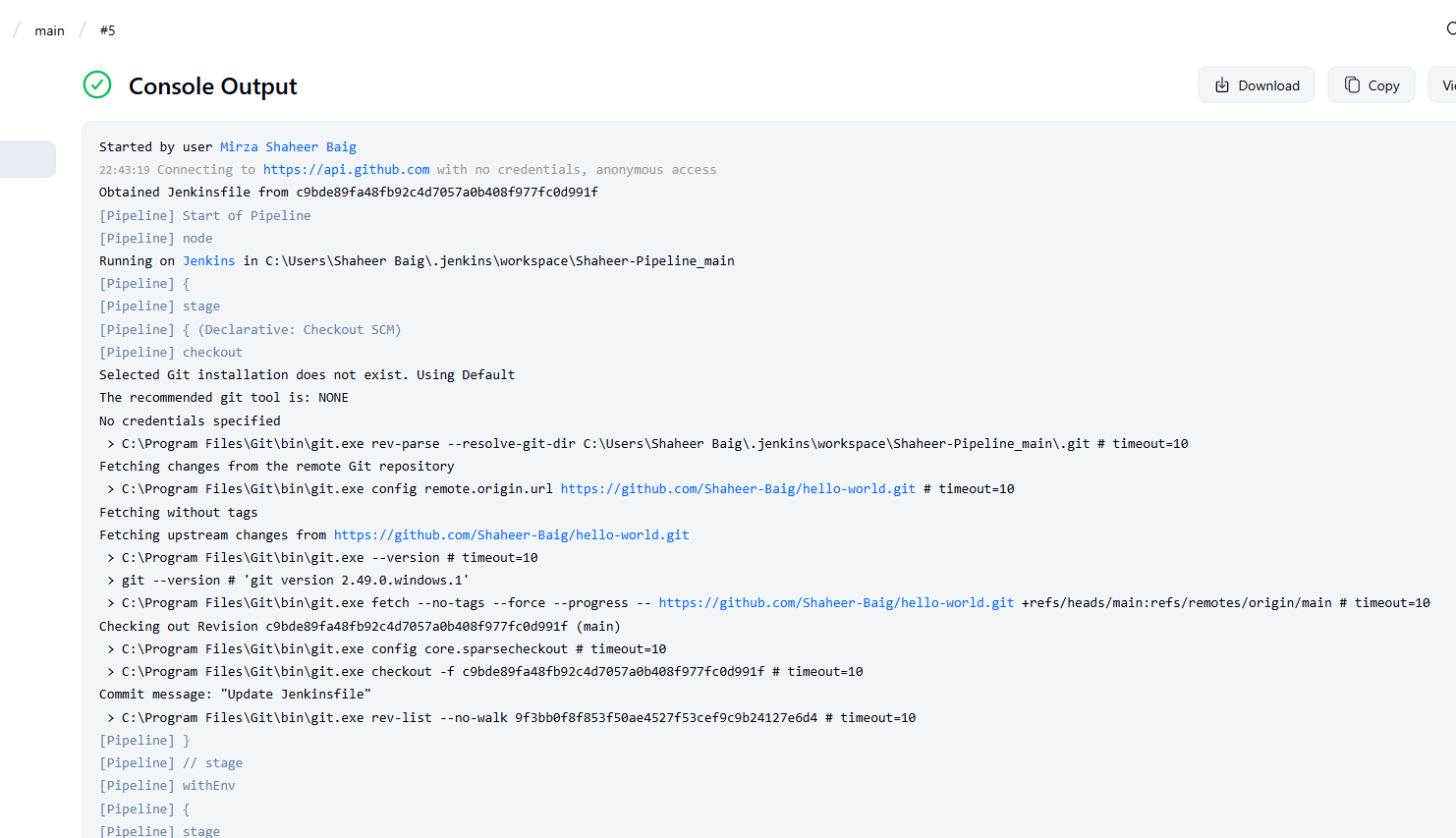


**Define Conditionals for each stage:**

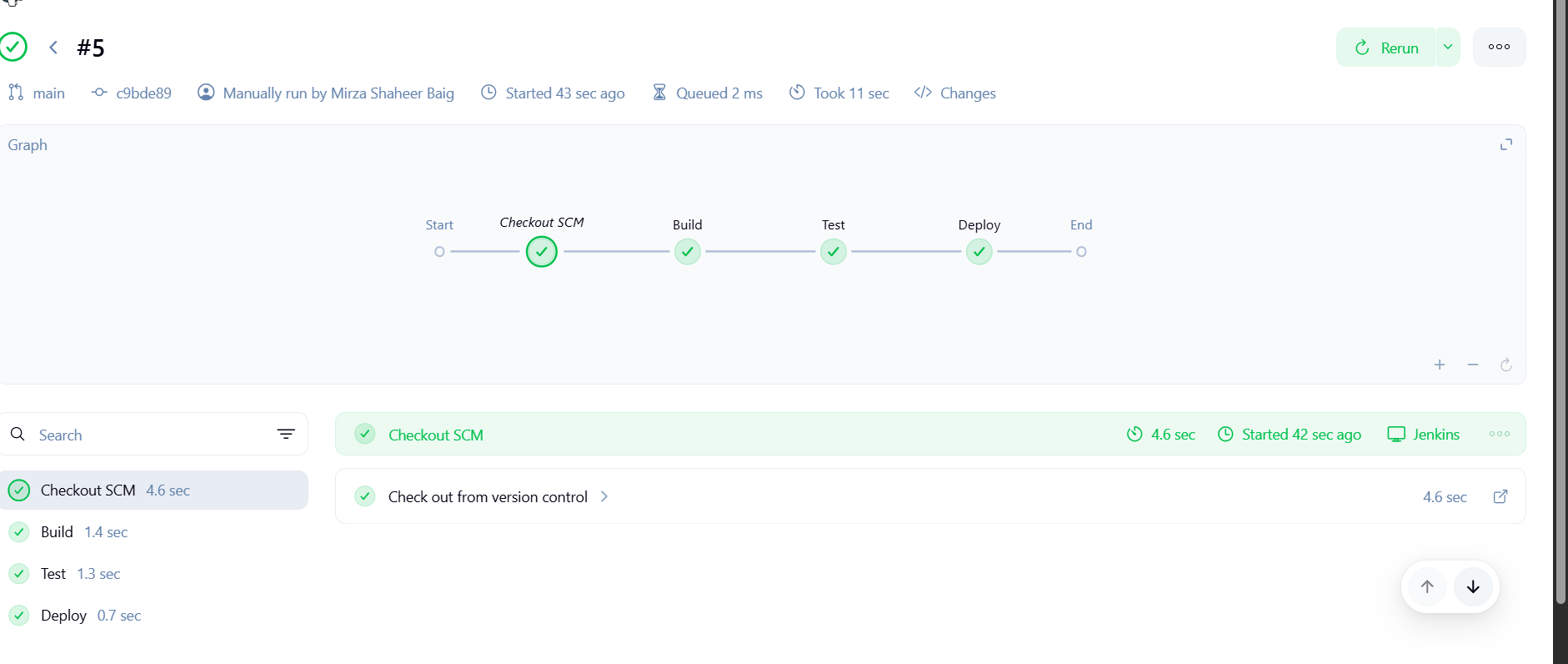




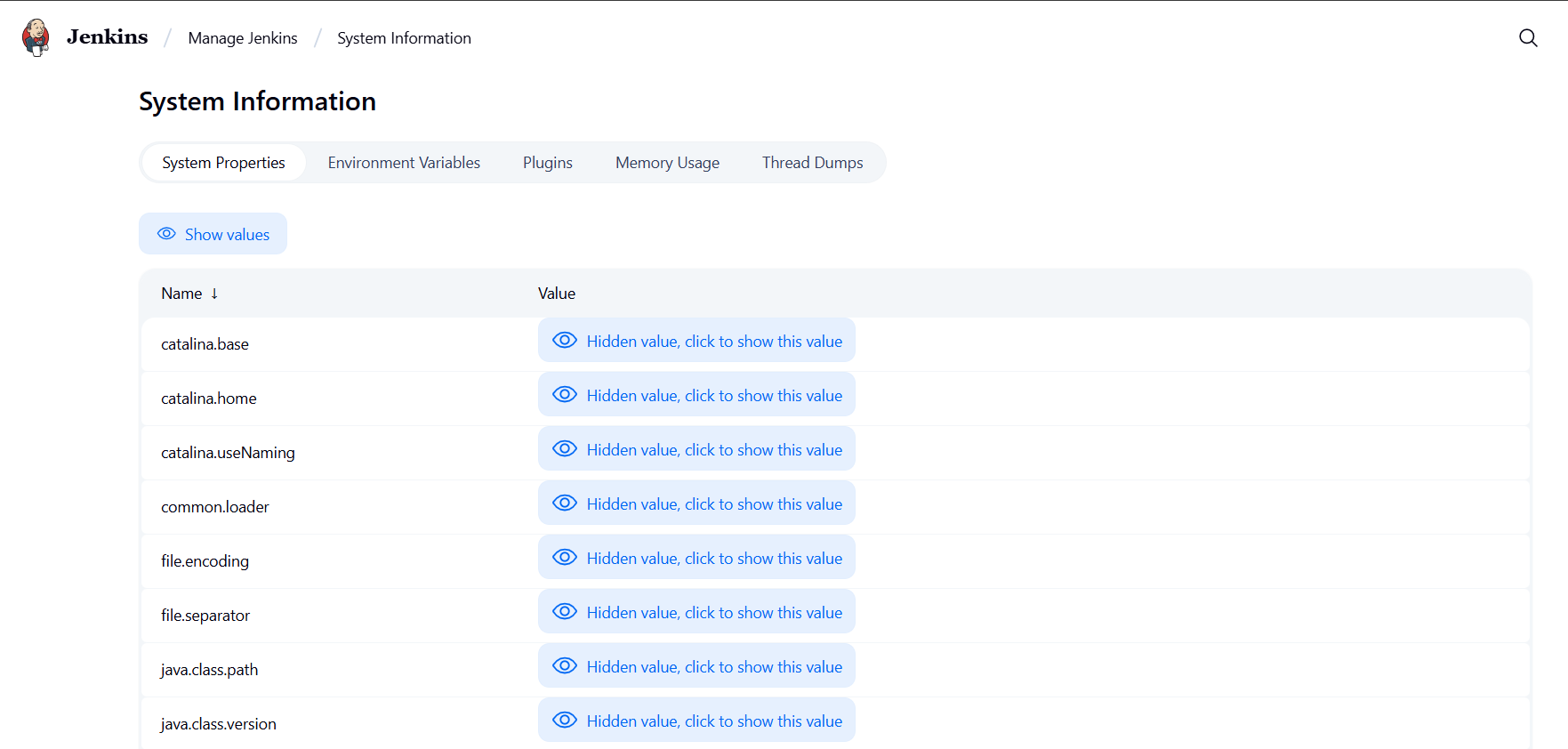
**Build Again:**

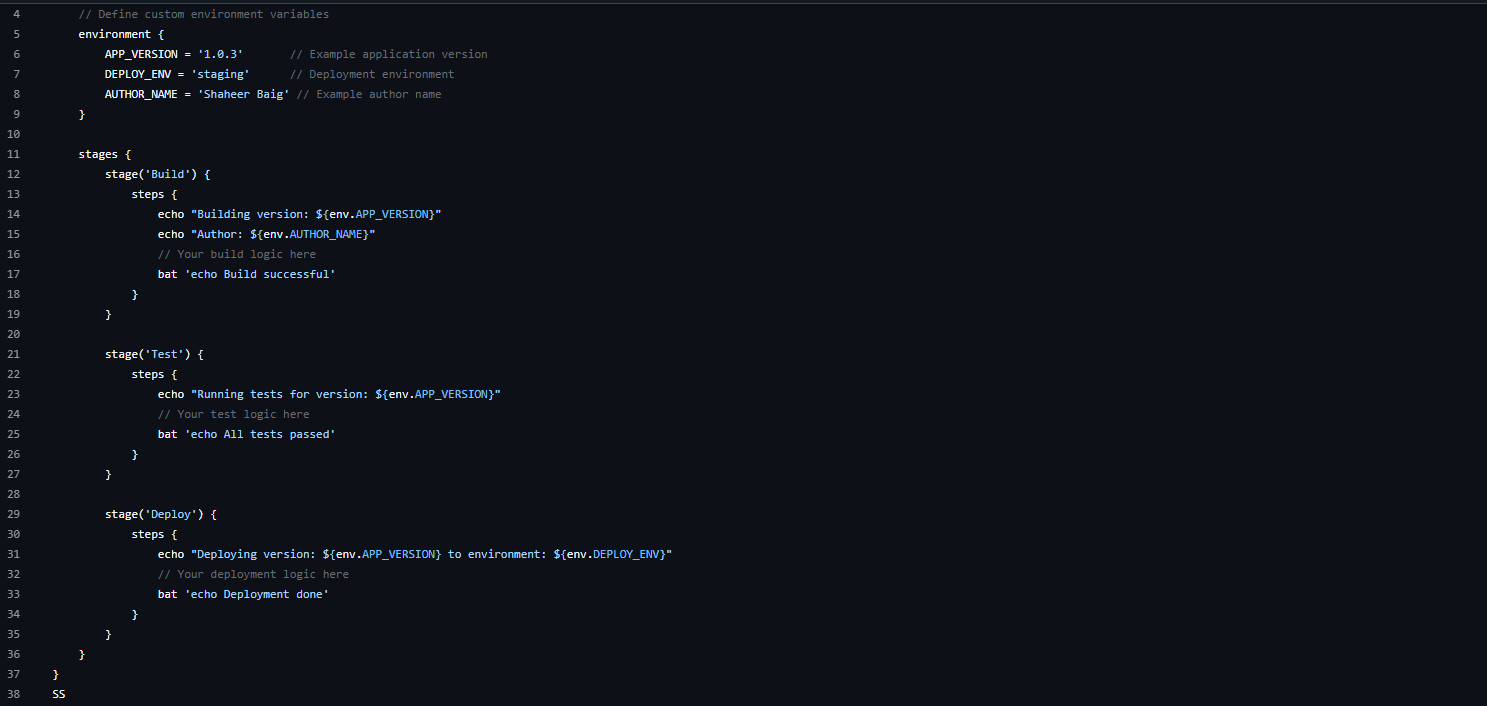


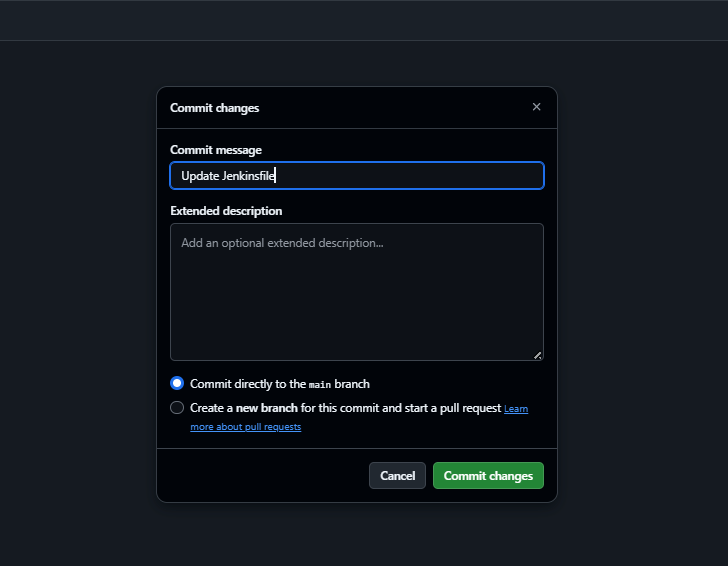
**Stages:**



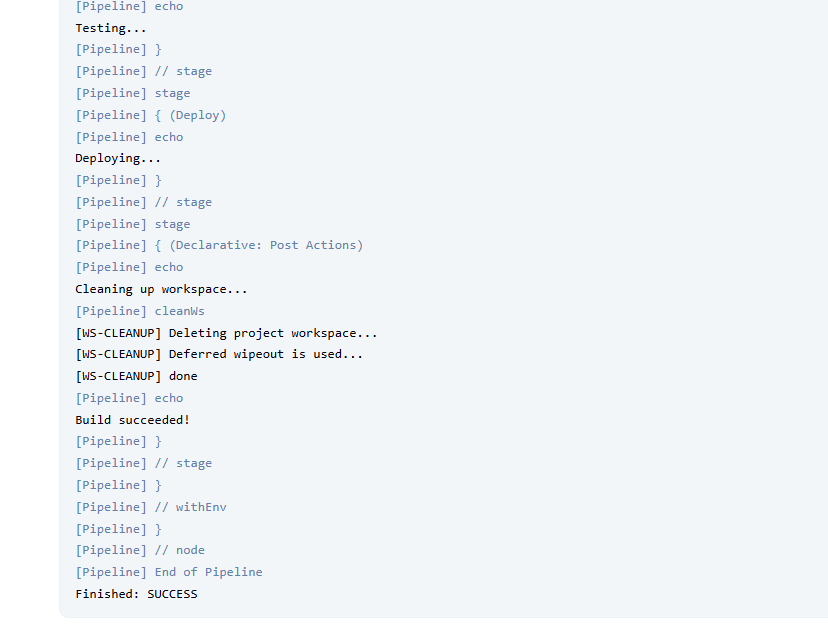
## Environment Variables:



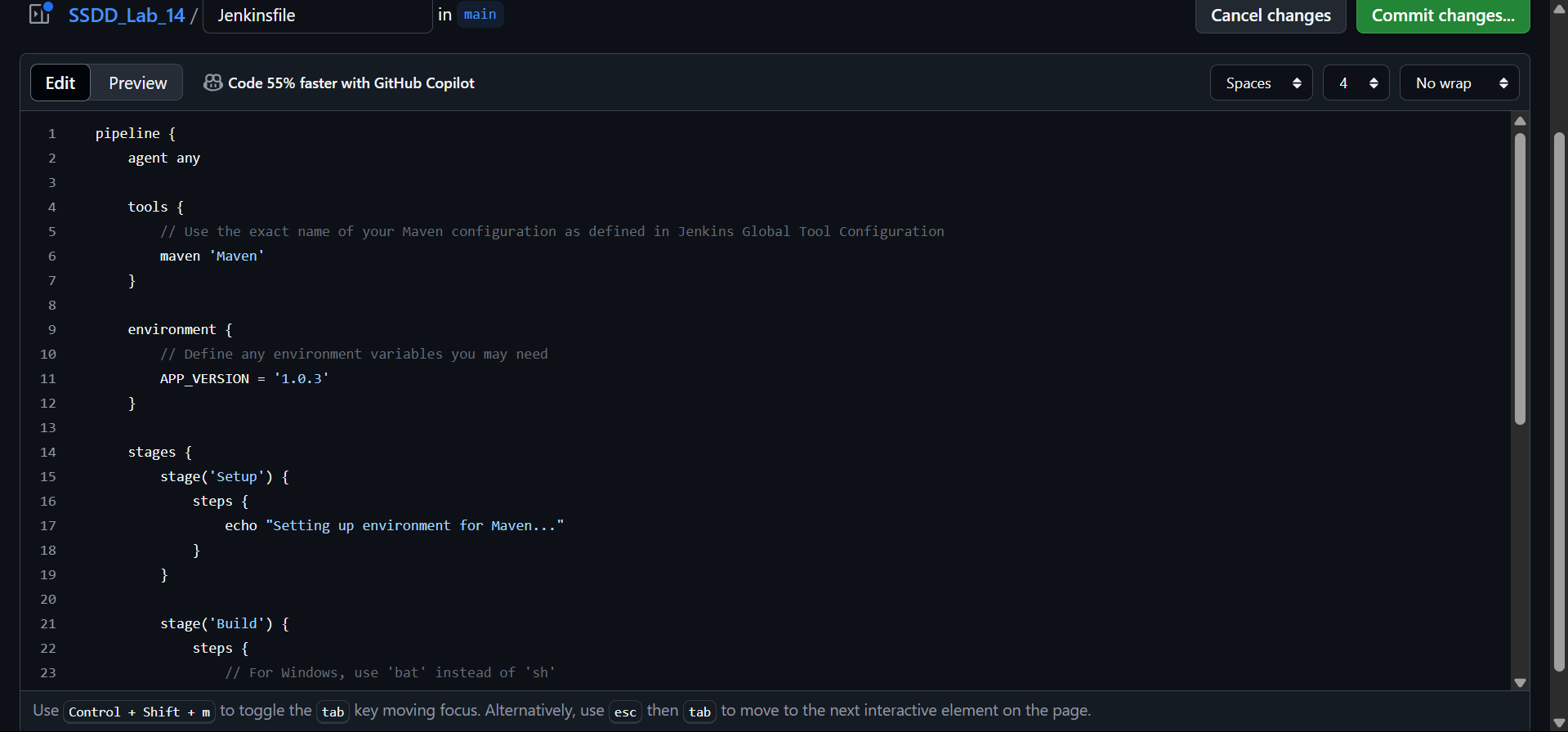




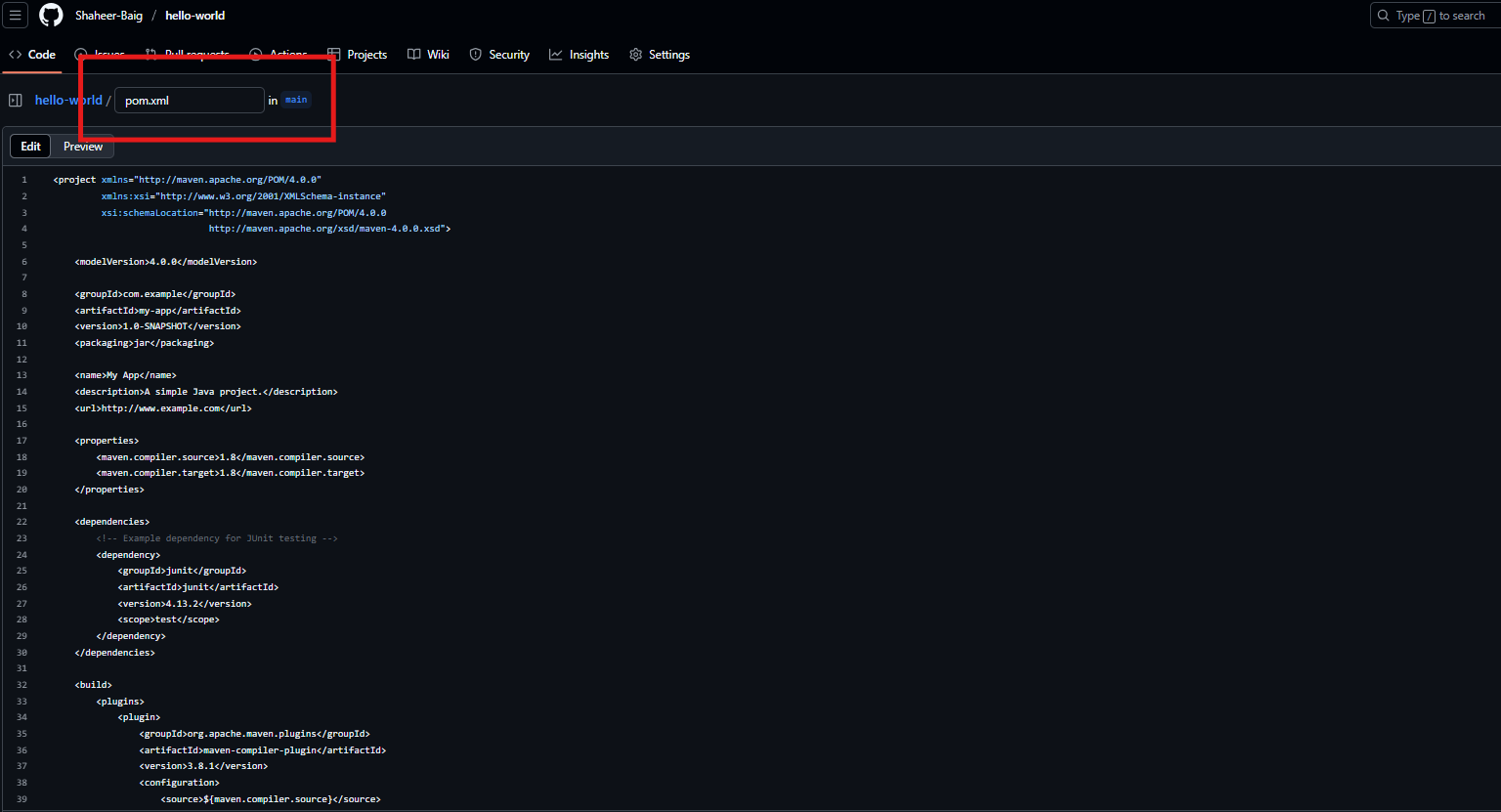
**Built Again:**

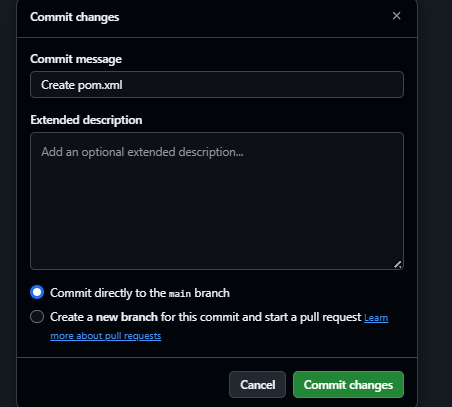


**Tools attribute for build tools:**

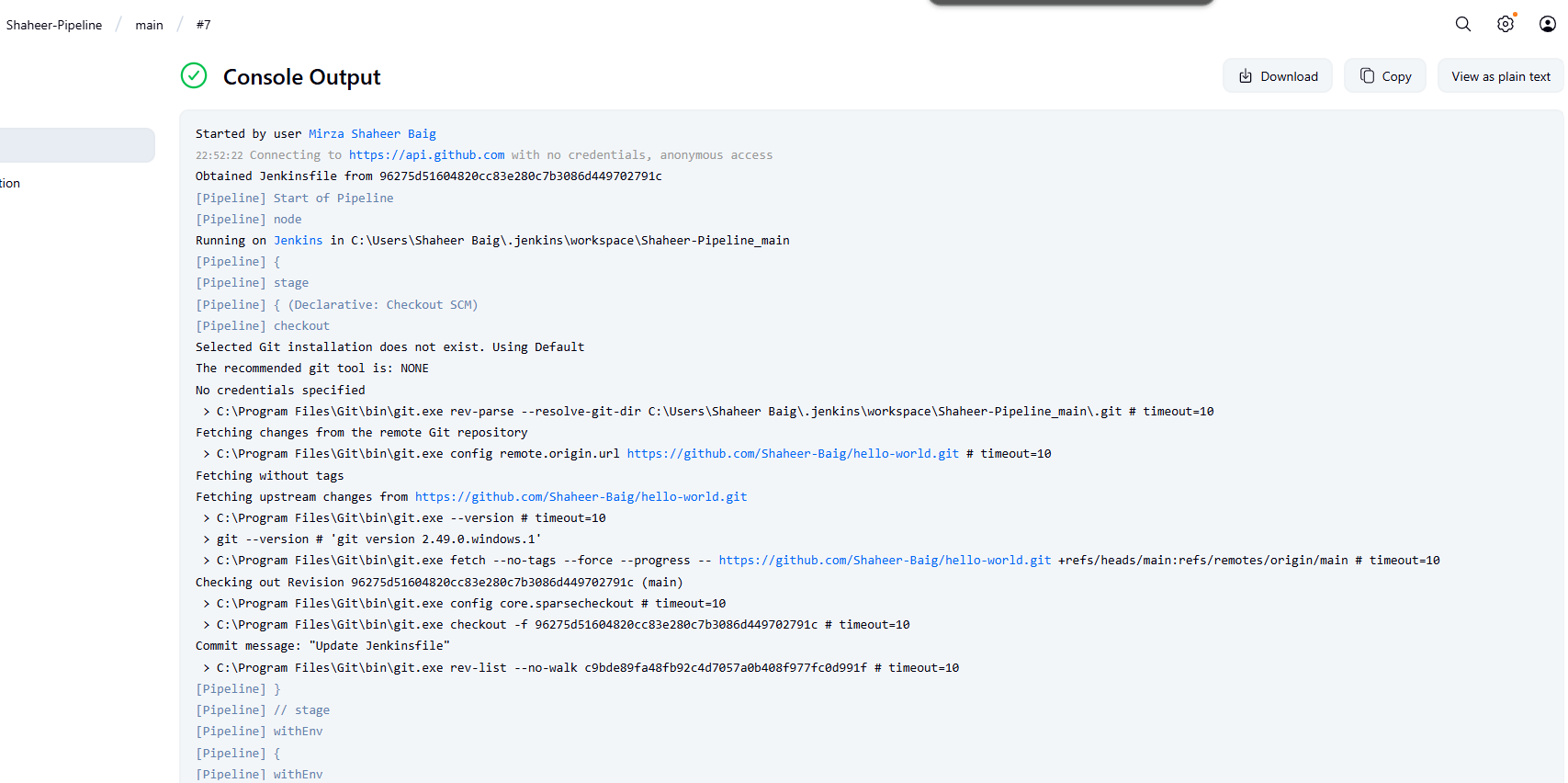


**Create pom.xml:**

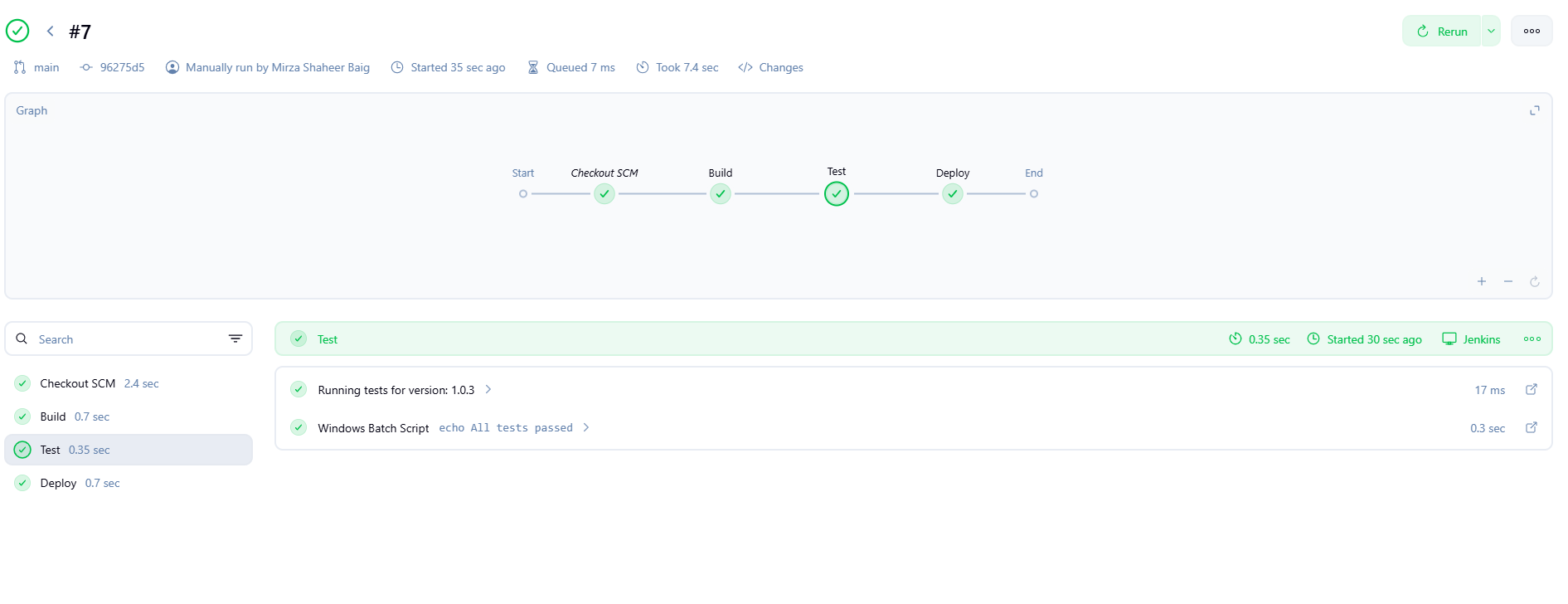
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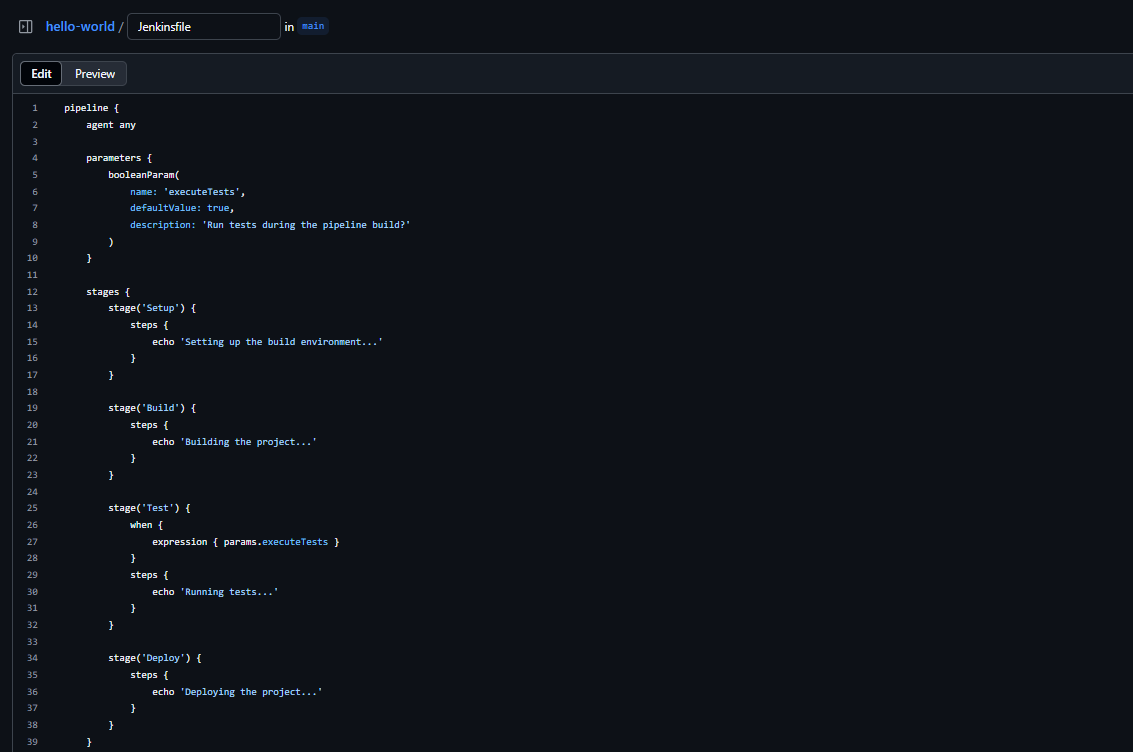
**Build Again:**

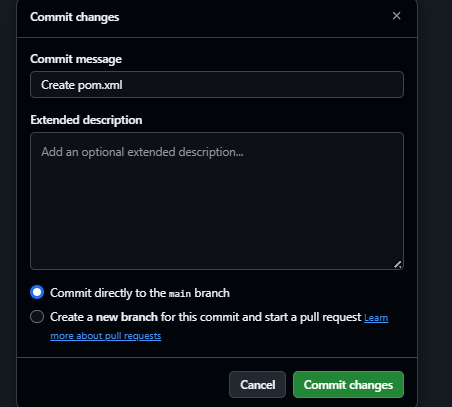
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**Stages:**

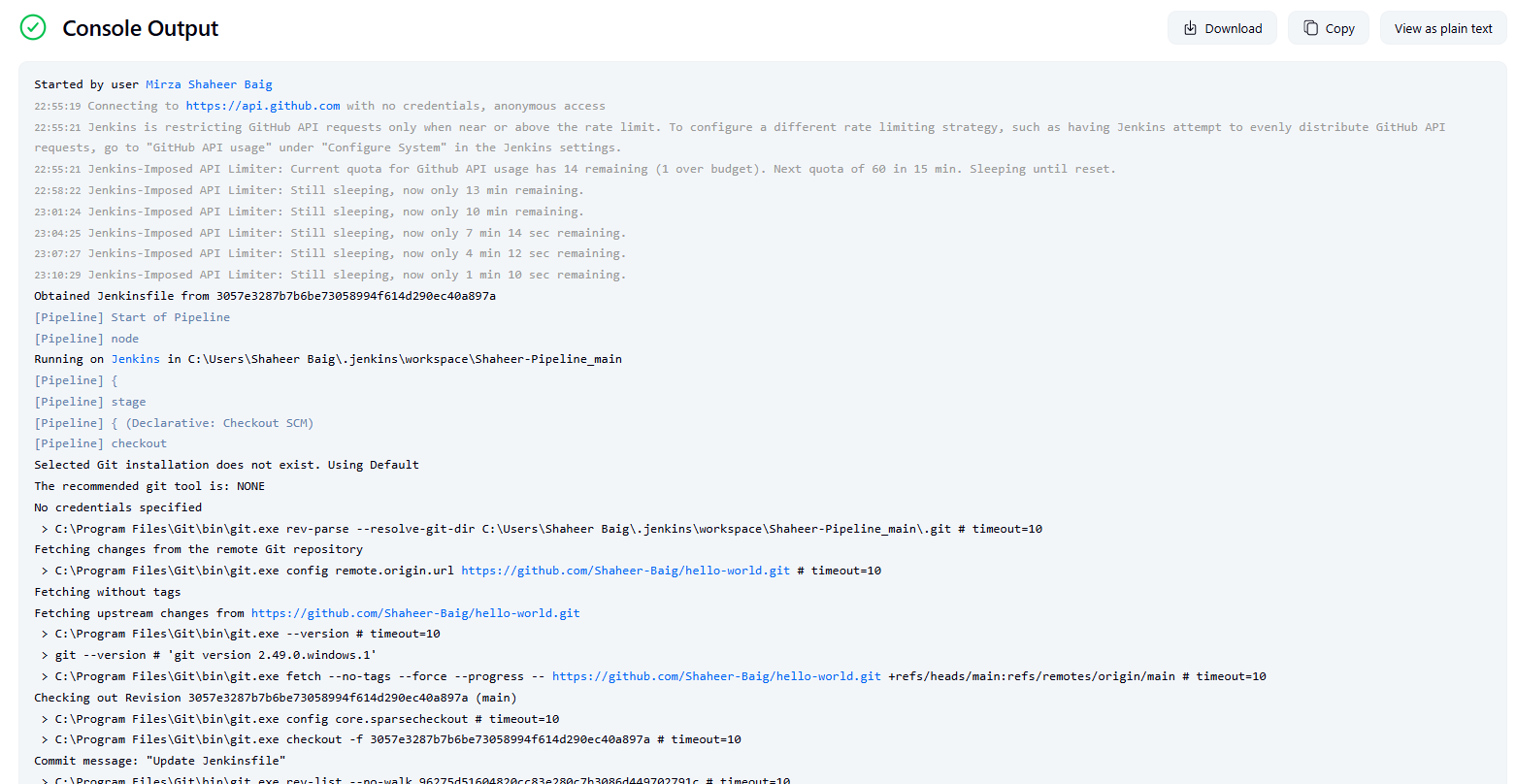
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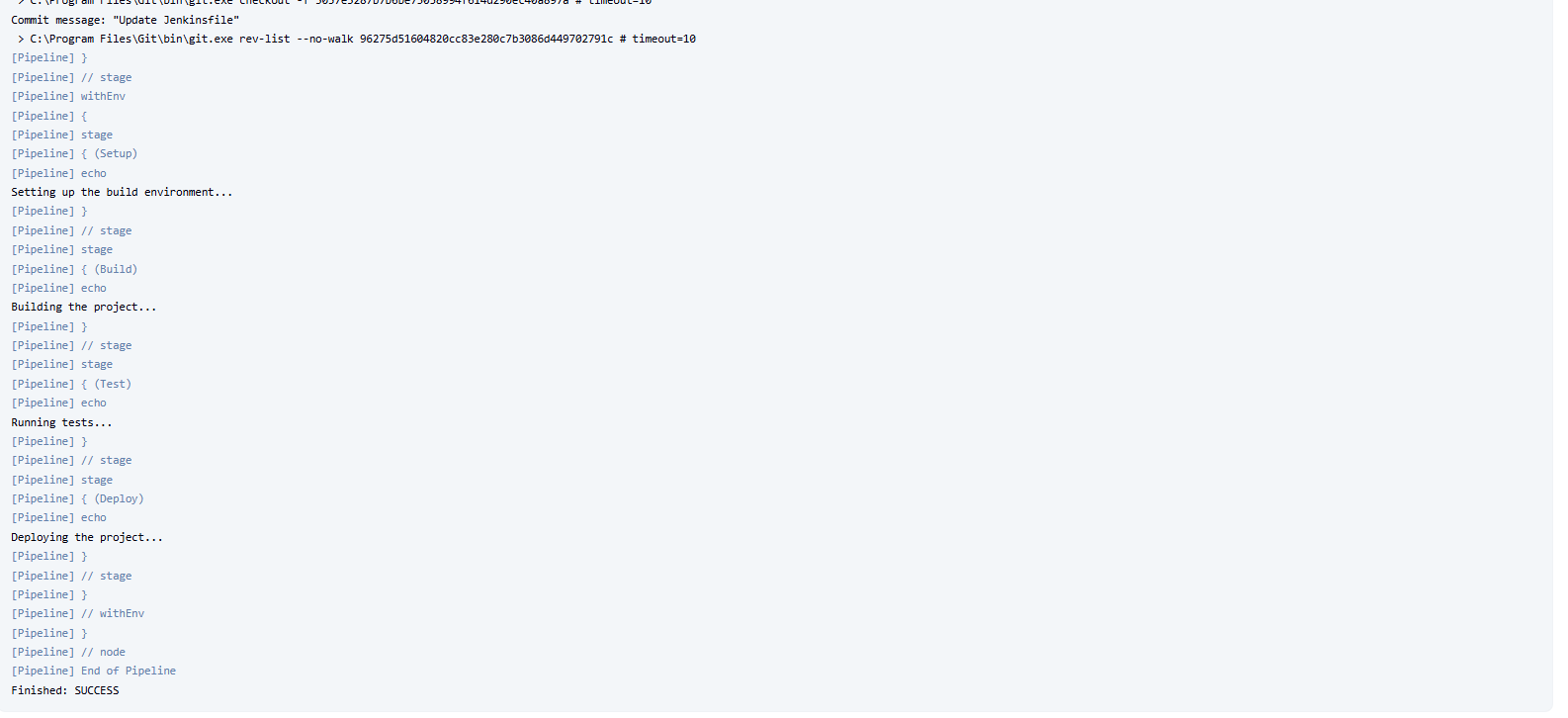
**Parameters in Jenkins:**

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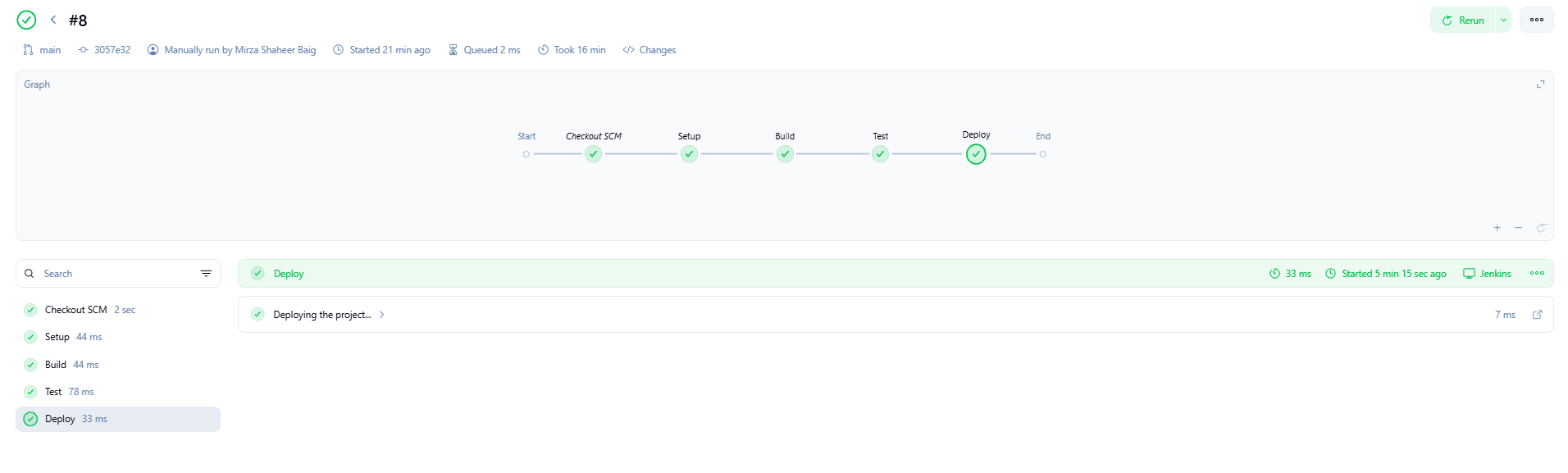
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**Build Again:**

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### Stages:

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