

Lab Exercise 20

Creating a Pipeline script

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Batch:- DevOps B1

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Course:- Btech - CSE

To:- Hitesh Sharma Sir

Objective: To create a pipeline script for automating build processes in Jenkins

Tools required: Jenkins

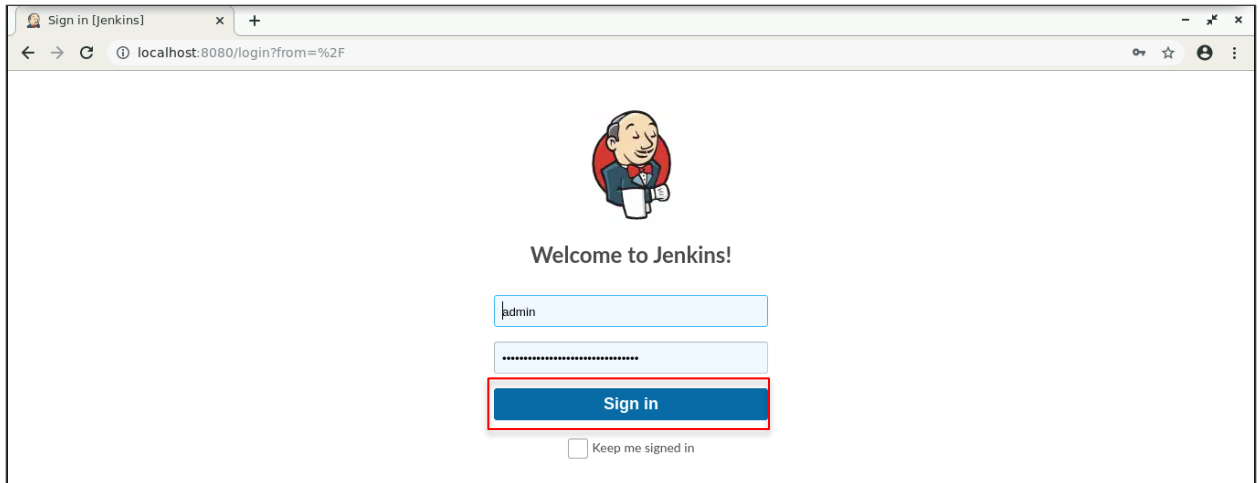
Prerequisites: None

Steps to be followed:

1. Log in to the Jenkins CI tool and create a pipeline script

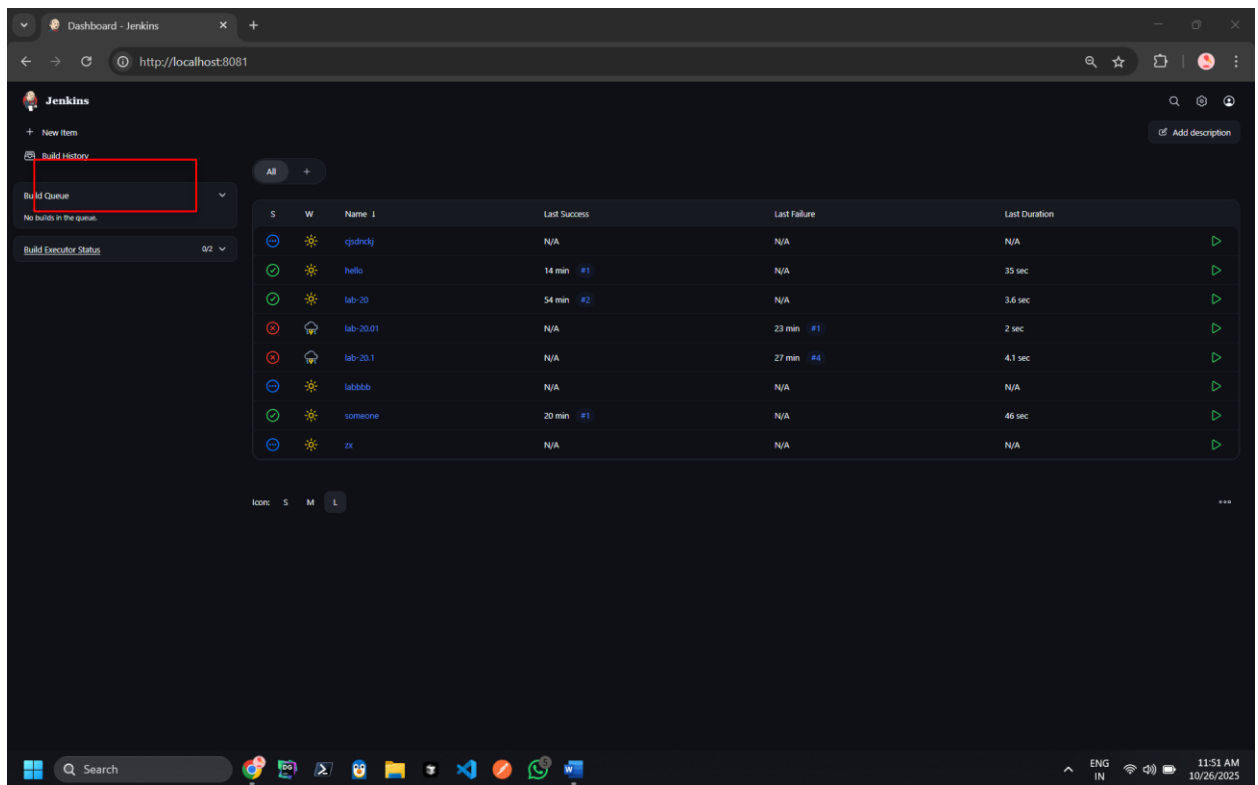
Step 1: Log in to the Jenkins CI tool and create a pipeline script

- 1.1 Open the browser, go to the Jenkins **Dashboard** by typing **localhost:8080** in your browser, provide the credentials, and click the **Sign in** button

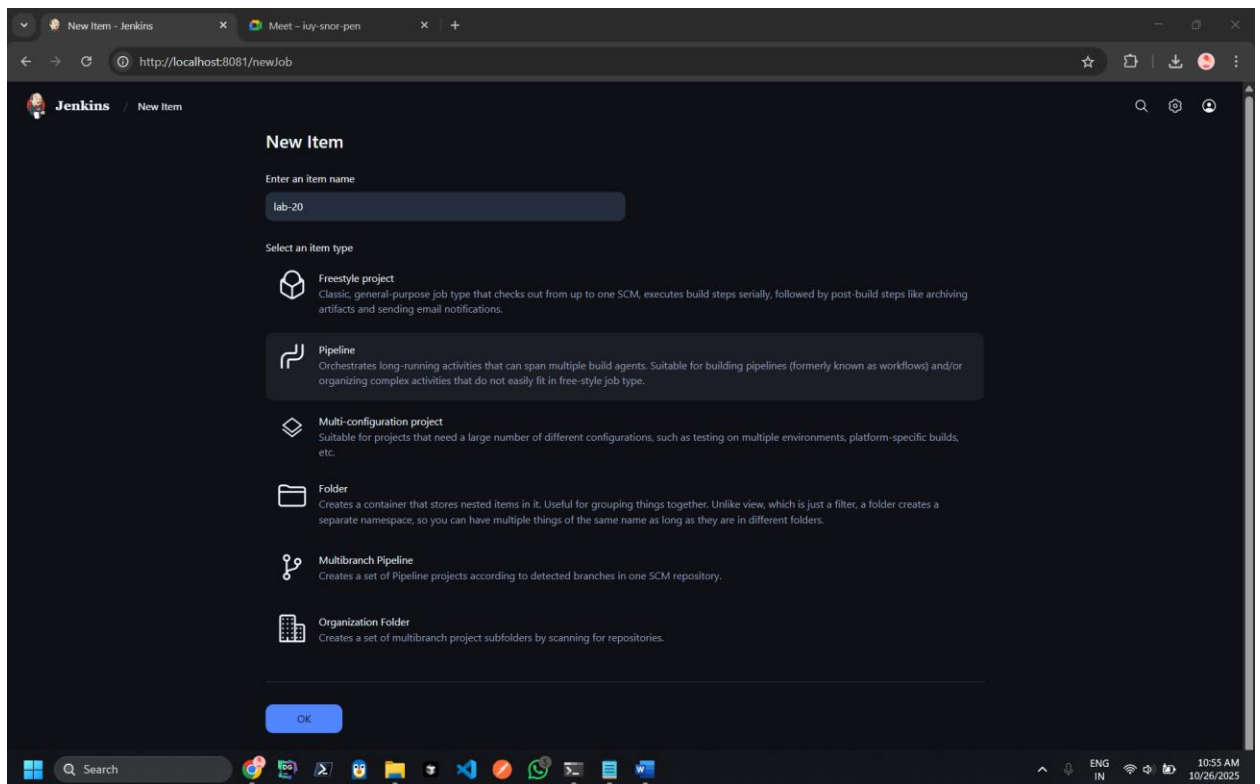


Note: The credentials for accessing Jenkins in the lab are Username: **admin** and Password: **admin**.

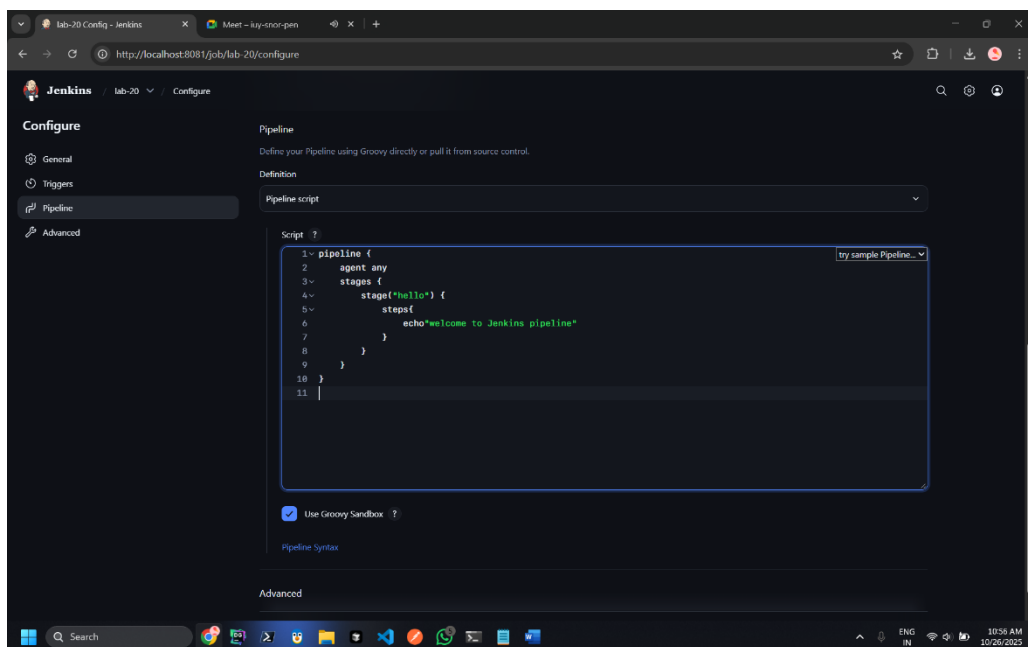
1.2 Click on the **New Item** option as shown in the screenshot below:



1.3 Enter a desired name for the project, select **Pipeline**, and then click on **OK** as shown in the screenshot below:



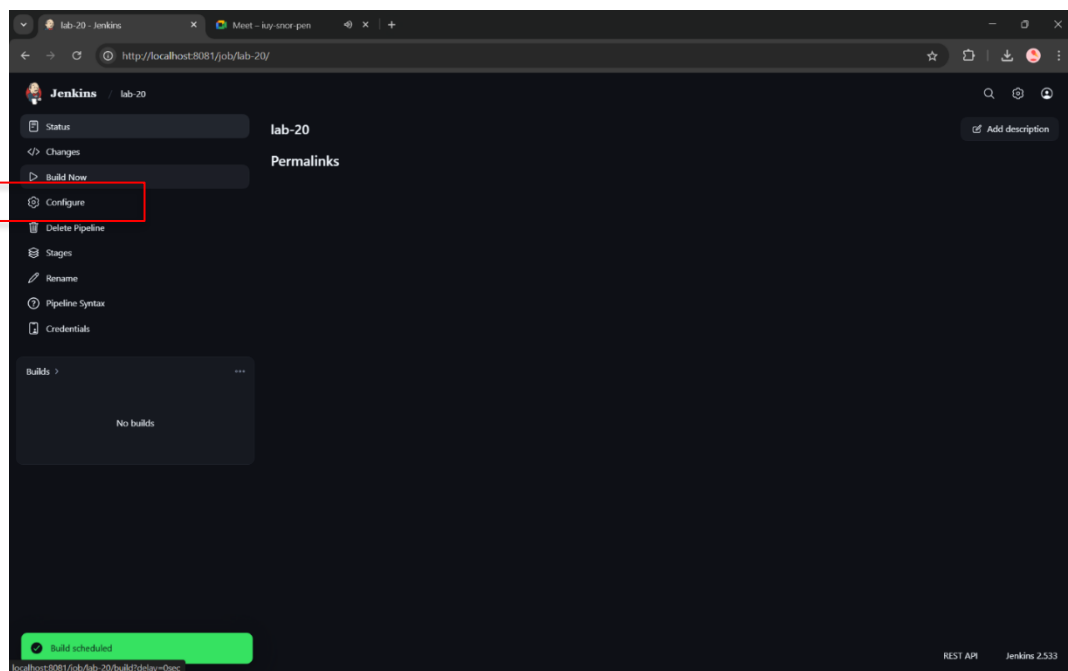
1.4 Click on **Pipeline** as shown in the screenshot below:



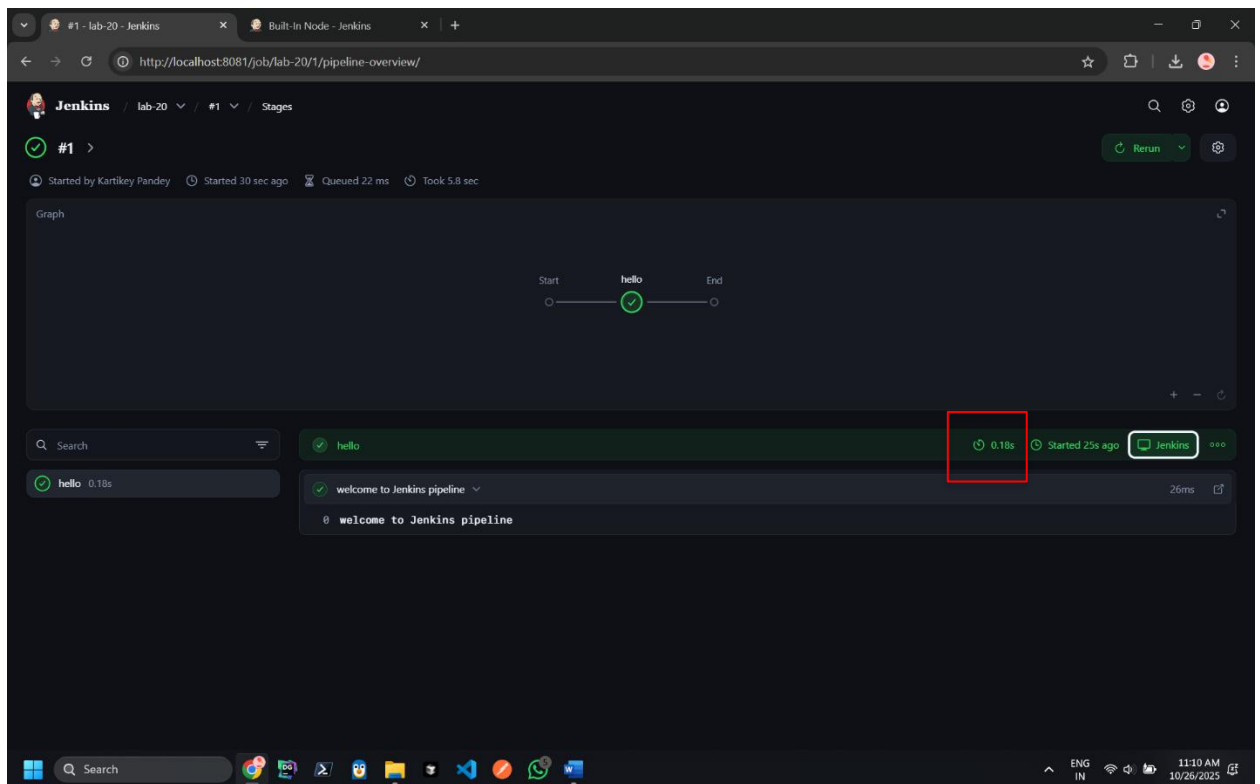
1.5 Enter the following pipeline script in the script editor and click on **Save** as shown in the screenshot below:

```
pipeline {
  agent any
  stages {
    stage("hello") {
      steps{
        echo"welcome to Jenkins pipeline"
      }
    }
  }
}
```

1.6 Click on **Build Now** to run the pipeline script as shown in the screenshot below:

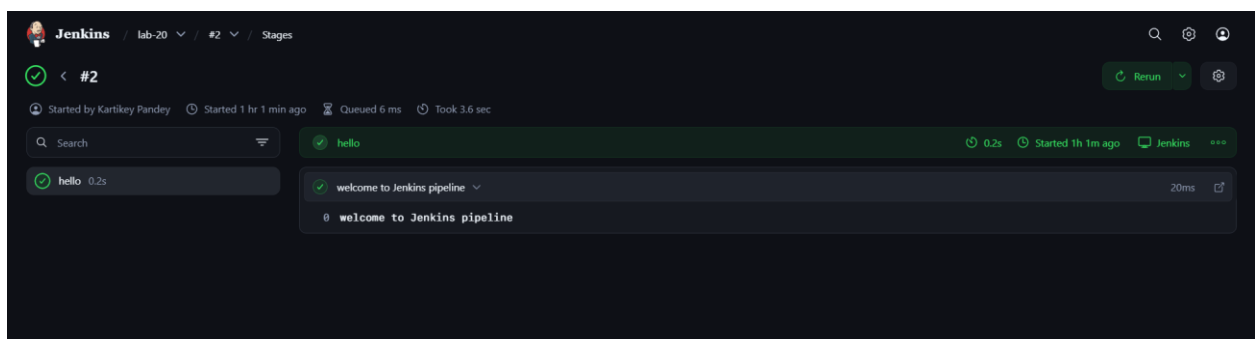


1.7 Hover over the milliseconds number next to the build stage name as shown in the screenshot below:

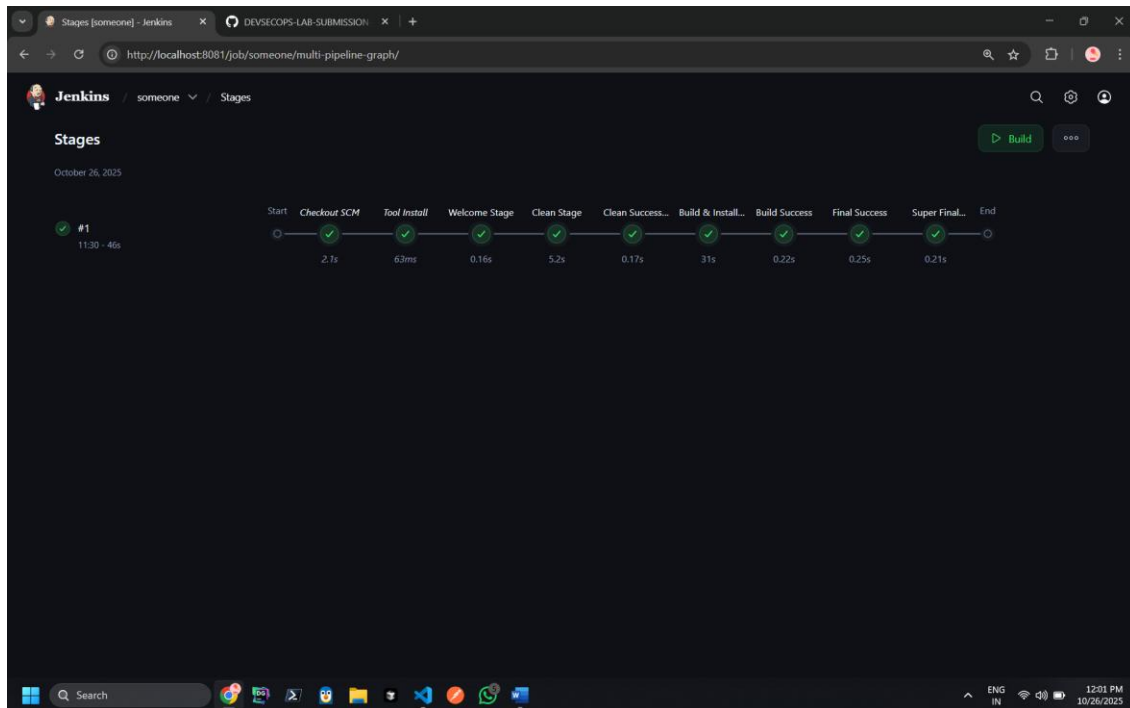
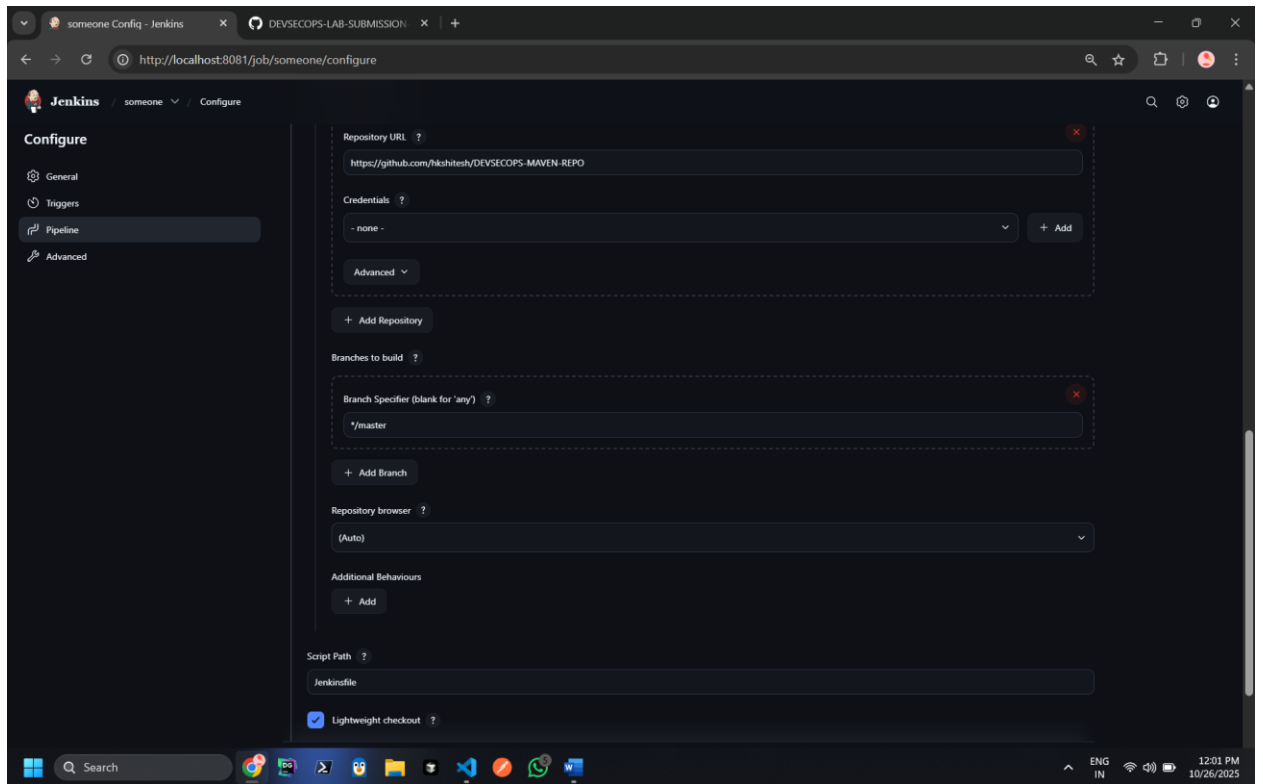


Note: Ensure that you hover the cursor over the milliseconds number without clicking on it

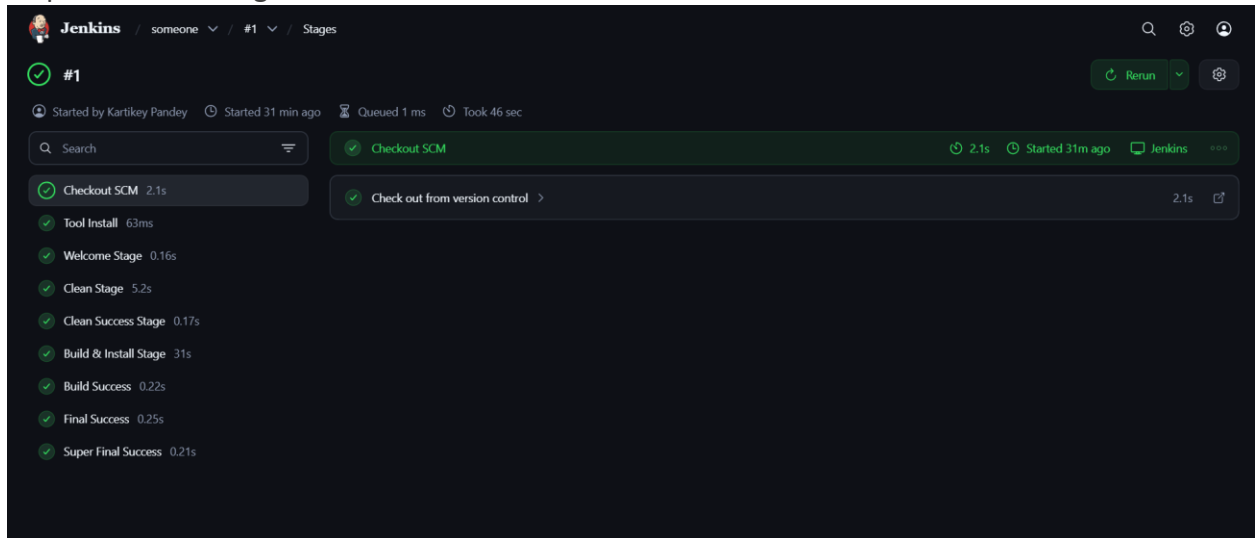
1.8 Click on **Logs** as shown in the screenshot below:



Now we have to do it with pipeline script with scm



Now we can see every step detail by checking on any step what time taken to build that step what it is doing



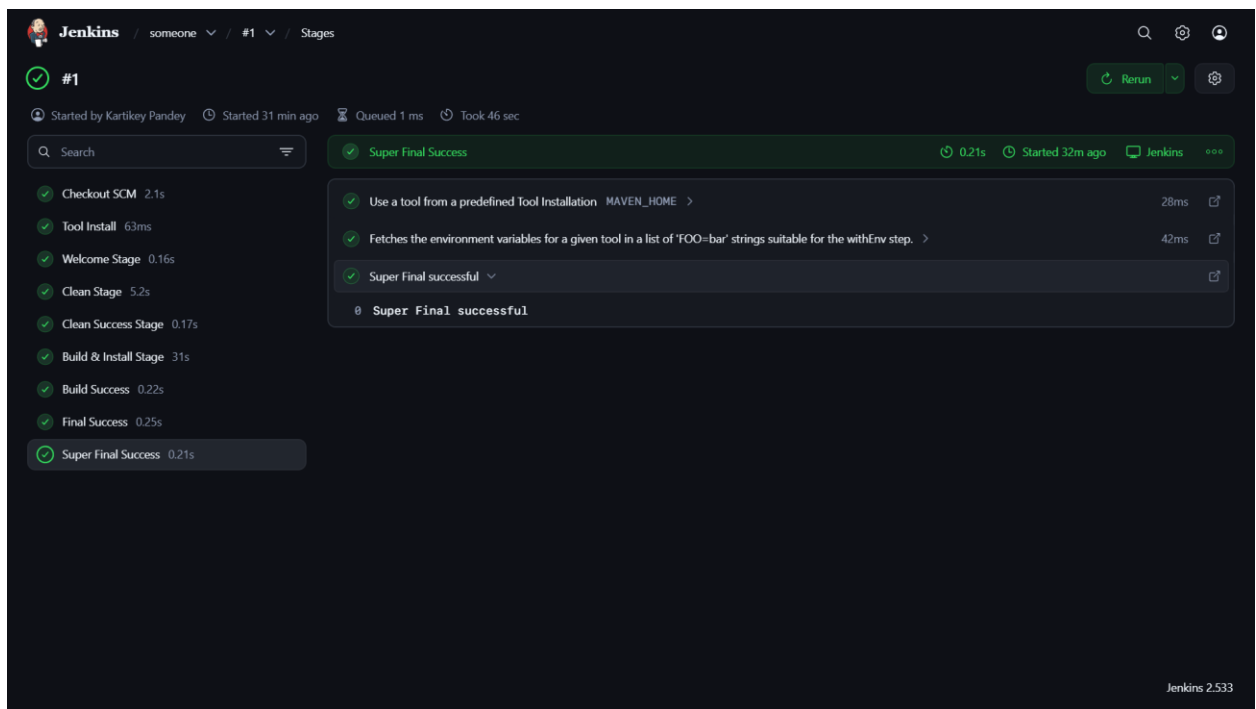
The screenshot shows the Jenkins build overview for stage #1. The build is successful, indicated by a green checkmark. The build was started by Kartikey Pandey, started 31 minutes ago, queued for 1 ms, and took 46 seconds. The build steps are listed on the left, and the details for the 'Checkout SCM' step are shown on the right.

Build Steps:

- Checkout SCM: 2.1s
- Tool Install: 63ms
- Welcome Stage: 0.16s
- Clean Stage: 5.2s
- Clean Success Stage: 0.17s
- Build & Install Stage: 31s
- Build Success: 0.22s
- Final Success: 0.25s
- Super Final Success: 0.21s

Checkout SCM Details:

- Check out from version control: 2.1s



The screenshot shows the Jenkins build overview for stage #1, with the 'Super Final Success' step expanded to show its details. The build is successful, indicated by a green checkmark. The build was started by Kartikey Pandey, started 31 minutes ago, queued for 1 ms, and took 46 seconds. The build steps are listed on the left, and the details for the 'Super Final Success' step are shown on the right.

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- Super Final Success: 0.21s

Super Final Success Details:

- Use a tool from a predefined Tool Installation: MAVEN_HOME: 28ms
- Fetches the environment variables for a given tool in a list of 'FOO=bar' strings suitable for the withEnv step: 42ms
- Super Final successful: 0.21s

Thank You