

Lab Exercise 20-A

Creating a Pipeline Script

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

Tools required: Jenkins

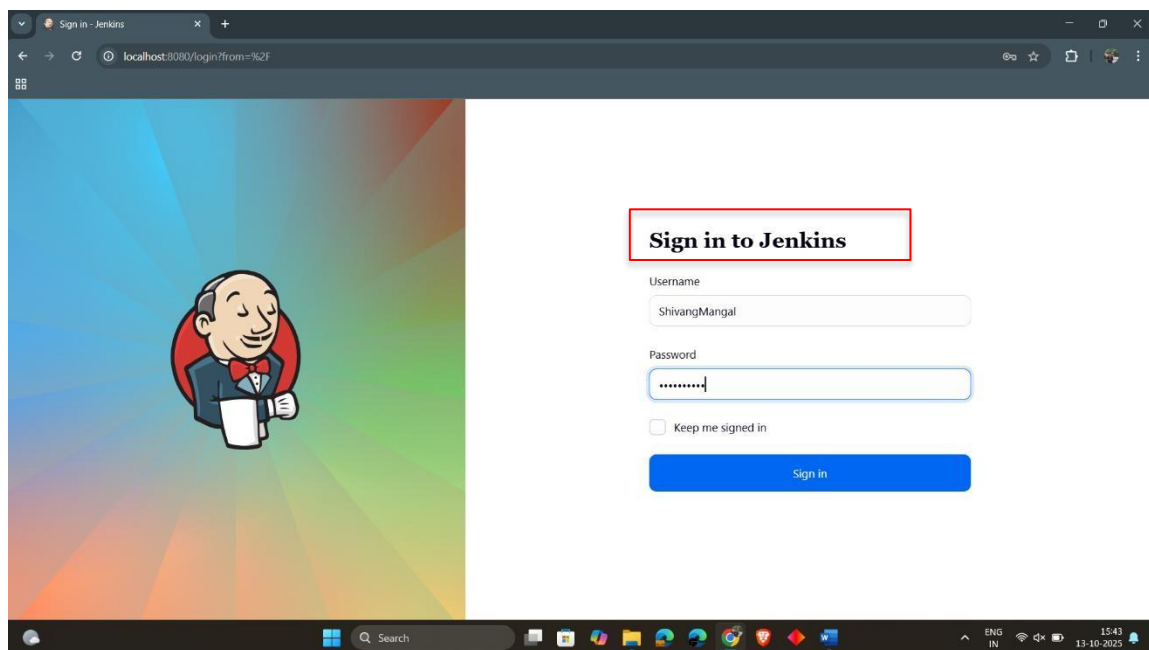
Prerequisites: None

Steps to be followed:

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

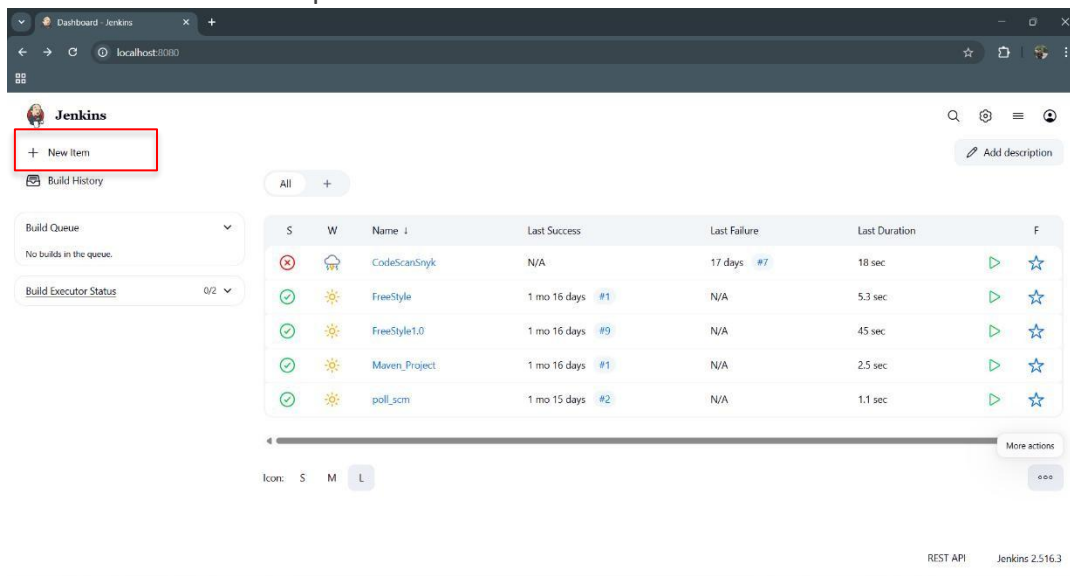
Step 1: Log in to the Jenkins CI tool and create a pipeline script

- 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

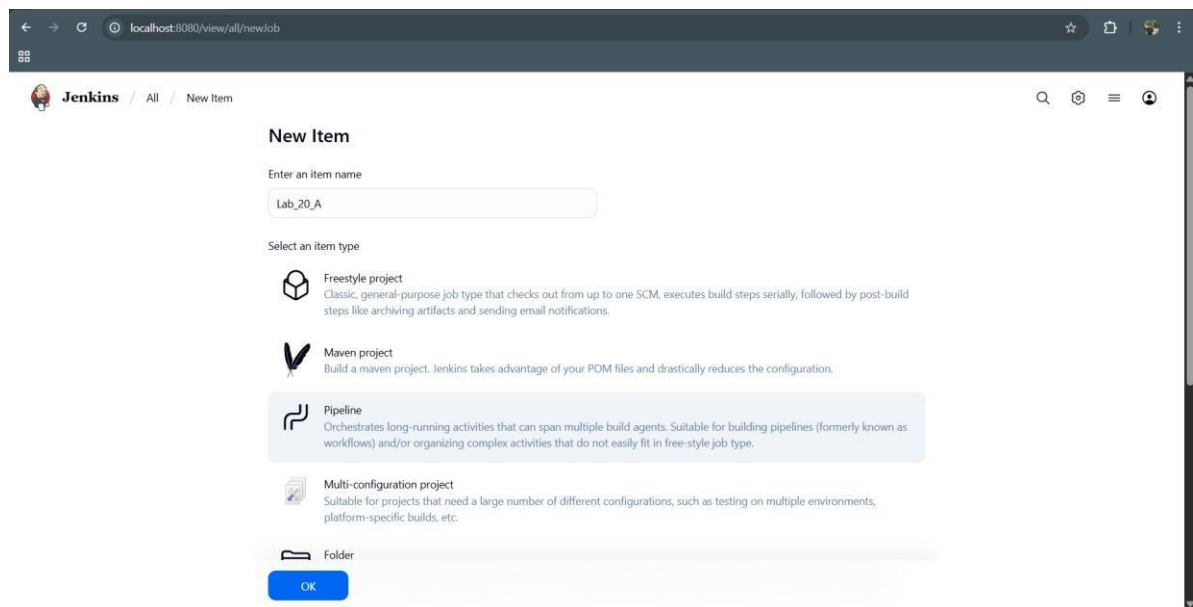


Note: The credentials for accessing Jenkins in the lab are Username: **admin** and Password: **admin**.

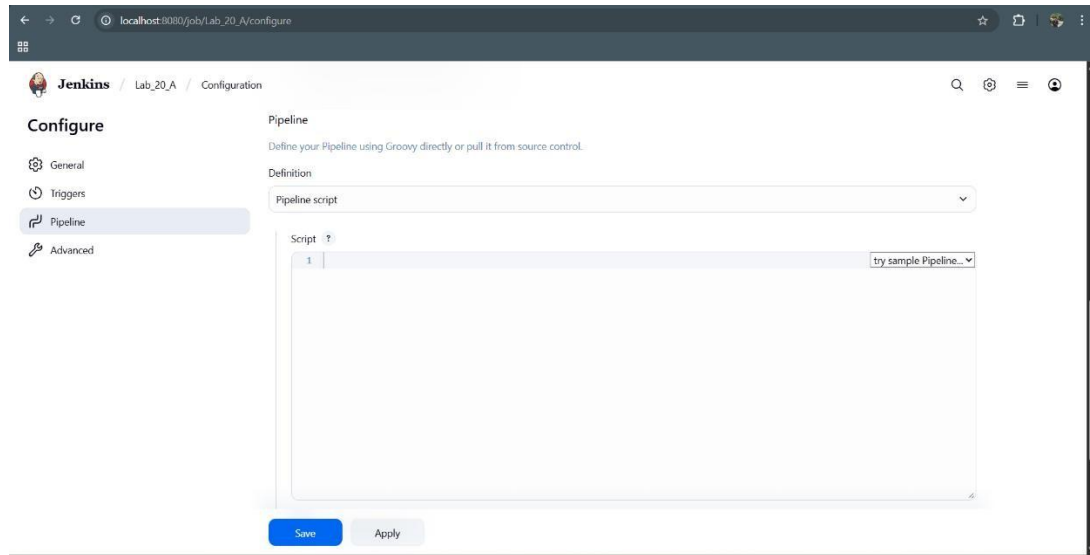
1.2 Click on the **New Item** option as shown in the screenshot below:



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

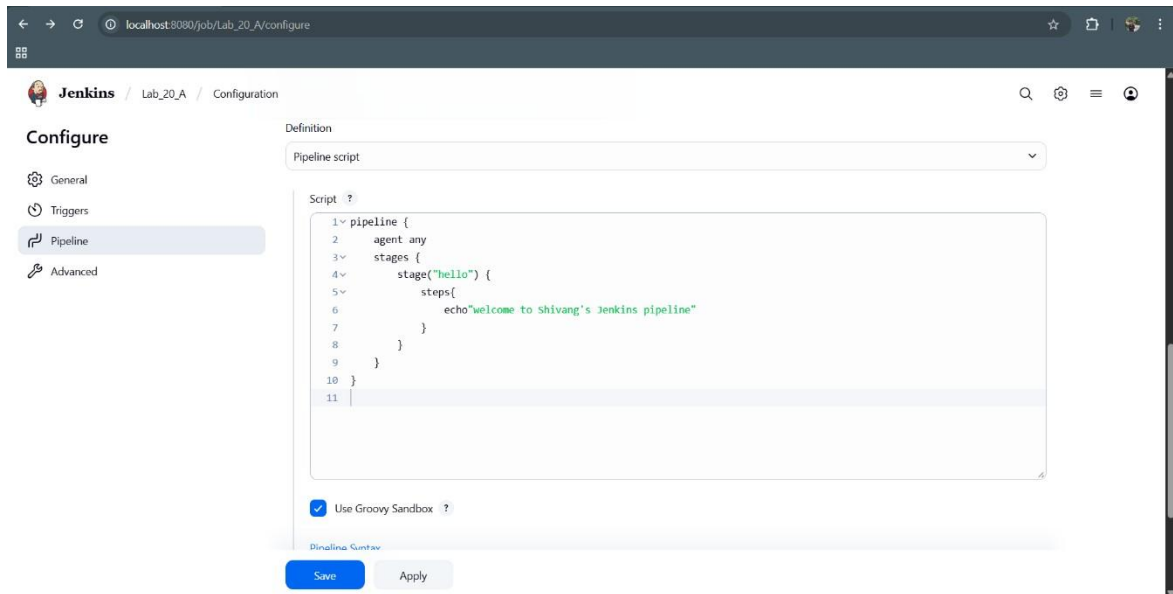


1.4 Click on **Pipeline** as shown in the screenshot below:



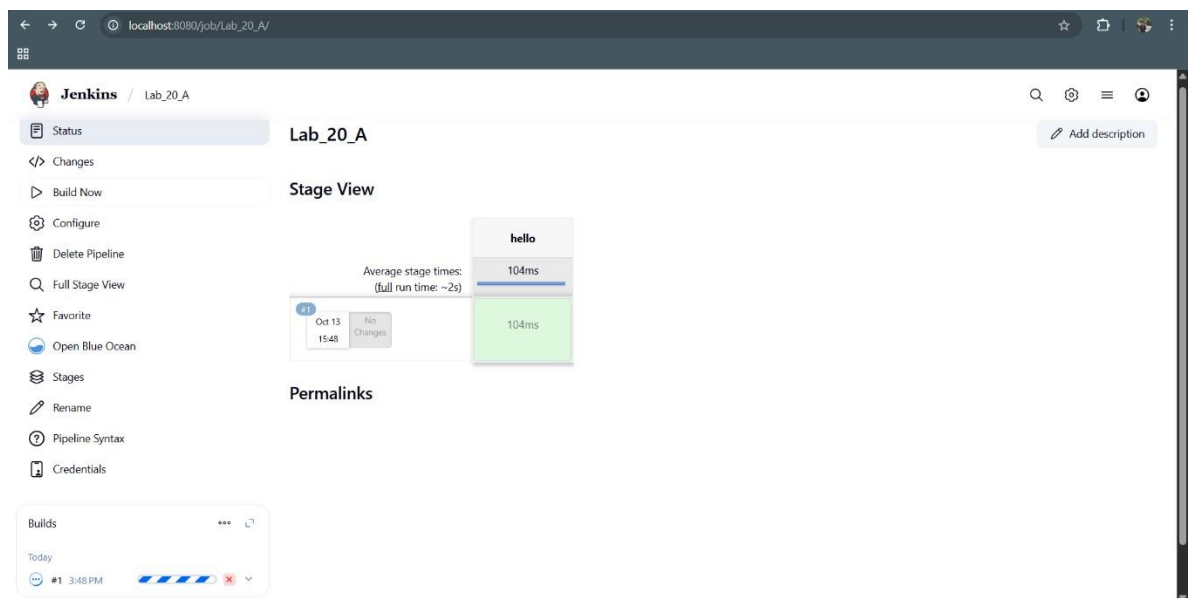
1.5 Enter the following pipeline script in the script editor and click on **Save** as shown in the screenshot below:

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



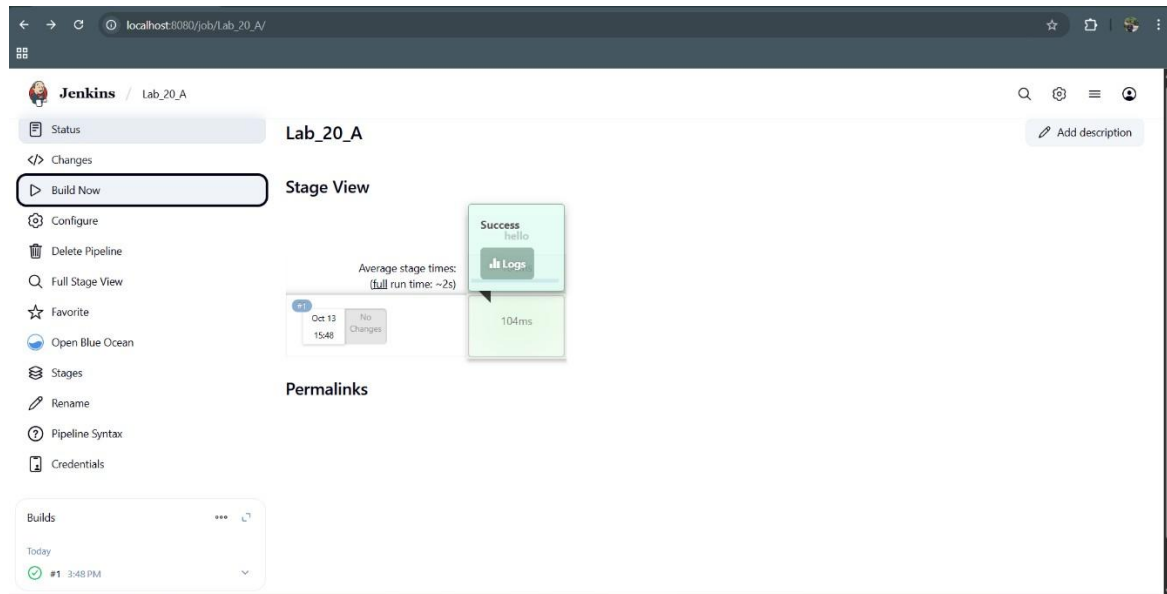
1.6 Click on **Build Now** to run the pipeline script as shown in the screenshot below:

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

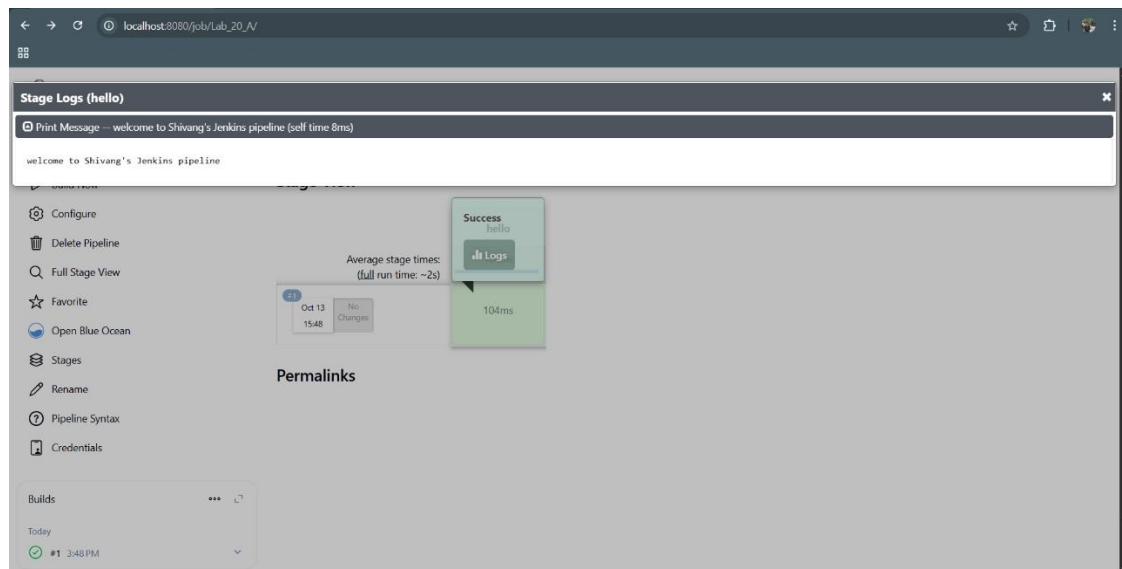


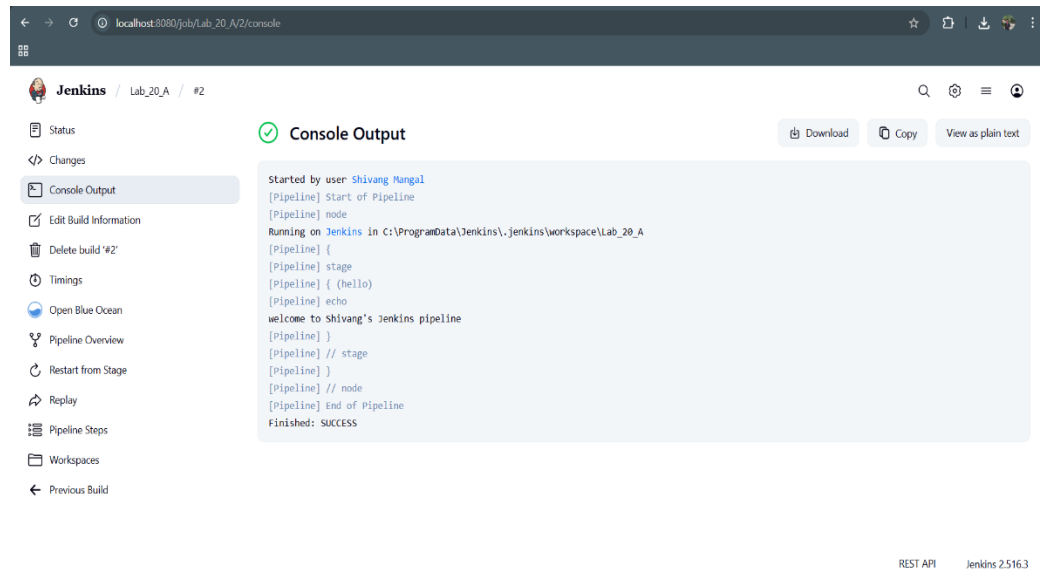
Note: Ensure that you hover the cursor over the milliseconds number without clicking on it

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



1.9 Check for the message in the top-left corner to confirm the successful execution of the pipeline stage as shown in the screenshot below:





The screenshot shows the Jenkins web interface in a browser. The address bar displays 'localhost:8080/job/Lab_20_A/2/console'. The left sidebar contains a list of actions: Status, Changes, Console Output (selected), Edit Build Information, Delete build '#2', Timings, Open Blue Ocean, Pipeline Overview, Restart from Stage, Replay, Pipeline Steps, Workspaces, and Previous Build. The main area is titled 'Console Output' with a green checkmark icon. It shows the build log for 'Lab_20_A' build #2, started by user 'Shivang Mangal'. The log content is as follows:

```
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in C:\ProgramData\Jenkins\jenkins\workspace\Lab_20_A
[Pipeline] {
[Pipeline] stage
[Pipeline] { (hello)
[Pipeline] echo
welcome to shivang's Jenkins pipeline
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```

At the bottom right of the console output area, it says 'REST API' and 'Jenkins 2.516.3'.

By following these steps, you have successfully created a pipeline script for automating build processes in Jenkins.