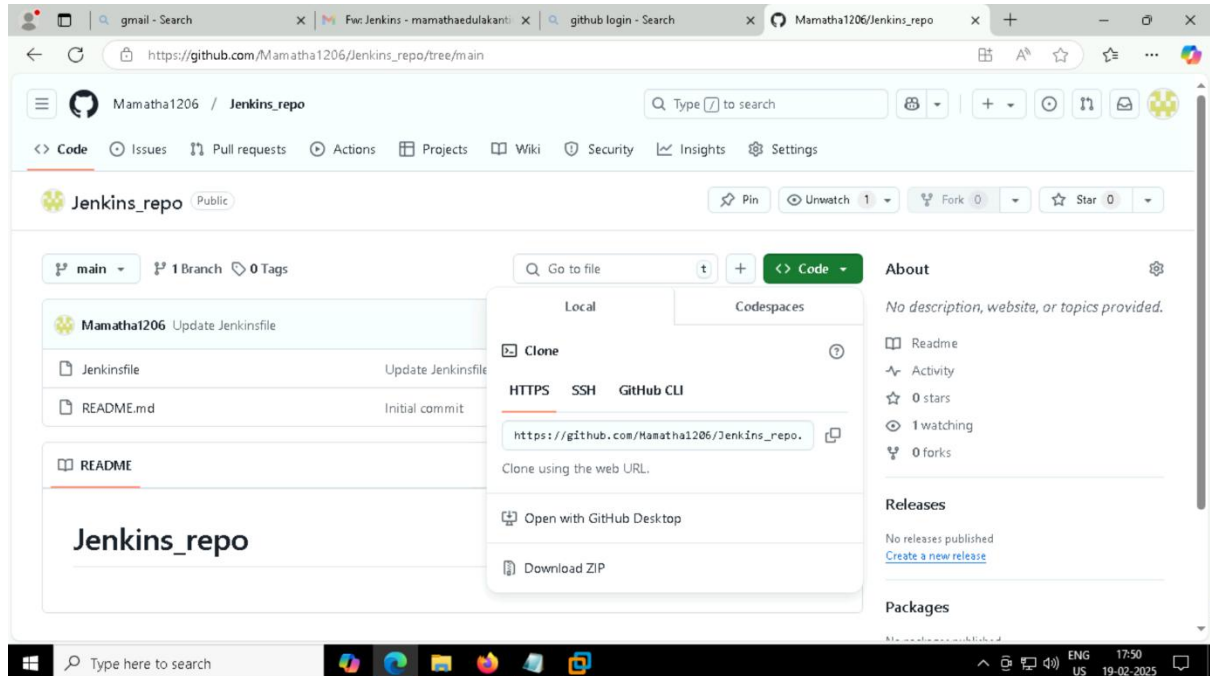


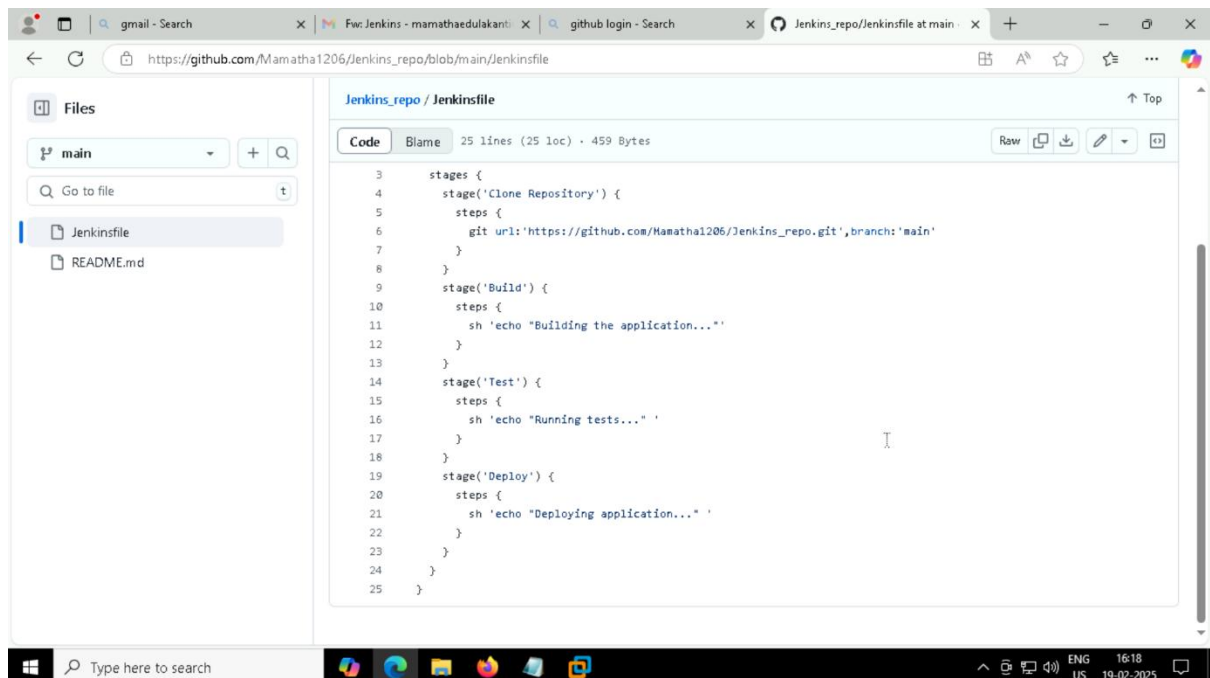
# Jenkins Assignment

## 1. Build and Deploy a Simple App using Jenkins

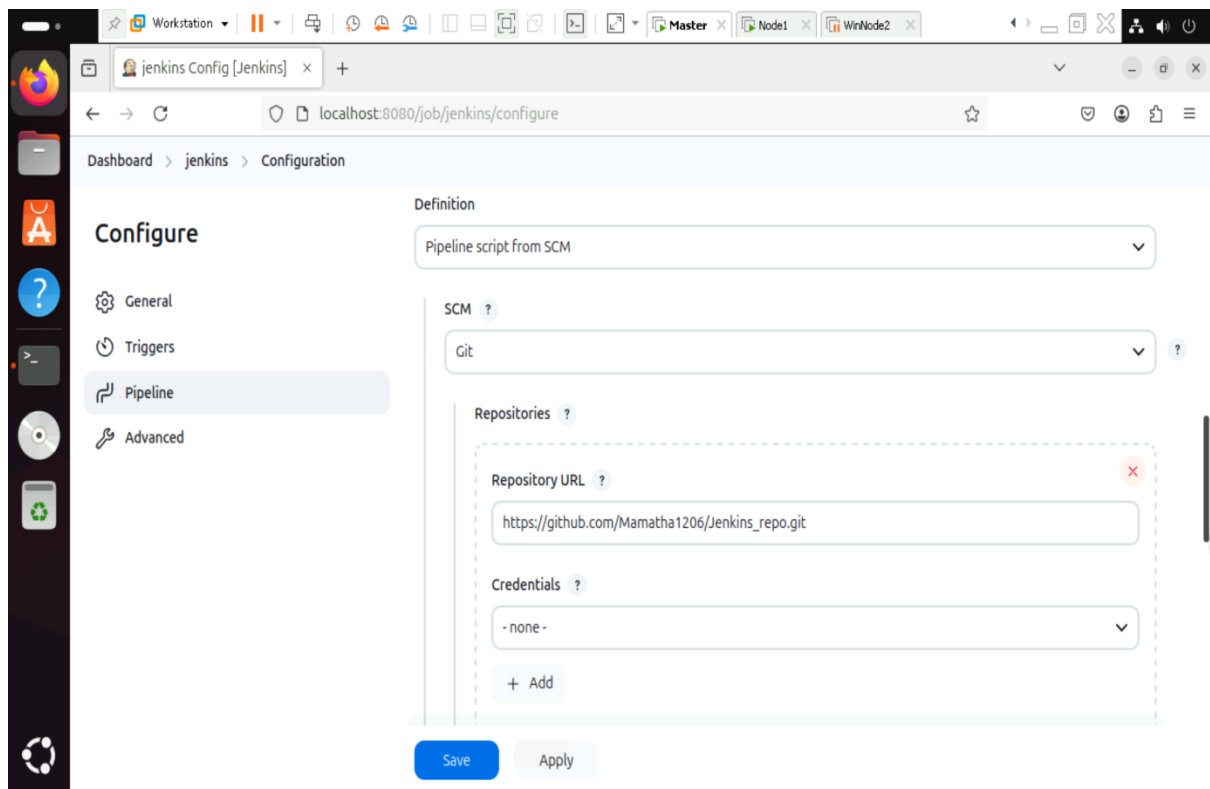
Step 1: In GitHub repository, create a new file named Jenkinsfile.



Step 2: Add the following groovy code in the Jenkinsfile.



### Step 3: Create a new Jenkins Pipeline Job



The screenshot shows the Jenkins Configuration page for a new job. The left sidebar contains a 'Configure' section with sub-items: General, Triggers, Pipeline (selected), and Advanced. The main content area is titled 'Definition' and shows a dropdown menu set to 'Pipeline script from SCM'. Below this, the 'SCM' section is expanded, showing a dropdown menu set to 'Git'. Underneath, the 'Repositories' section is expanded, showing a 'Repository URL' field with the value 'https://github.com/Mamatha1206/Jenkins\_repo.git' and a 'Credentials' dropdown menu set to '- none -'. There is a '+ Add' button below the credentials dropdown. At the bottom of the configuration area are 'Save' and 'Apply' buttons.

jenkins Config [Jenkins] x +

localhost:8080/job/jenkins/configure

Dashboard > jenkins > Configuration

**Configure**

- General
- Triggers
- Pipeline**
- Advanced

Definition

Pipeline script from SCM

SCM ?

Git

Repositories ?

Repository URL ?

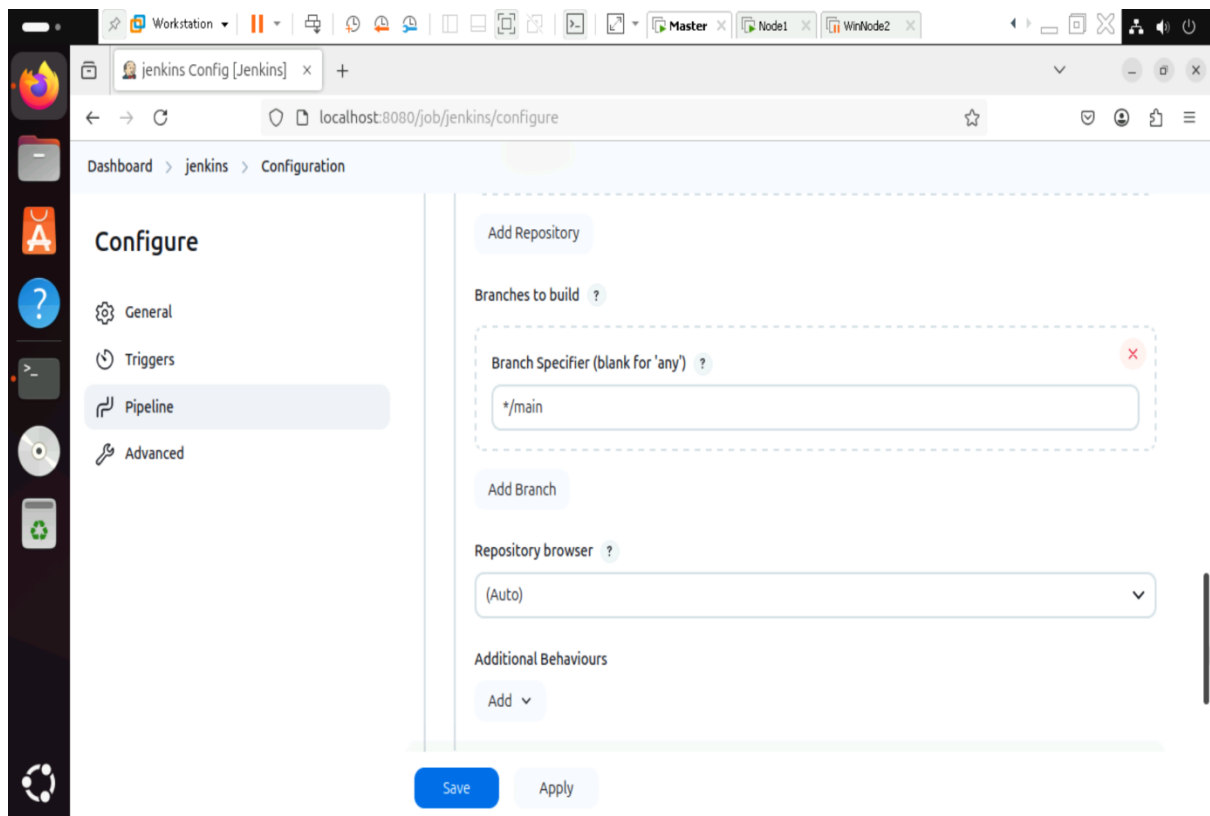
https://github.com/Mamatha1206/Jenkins\_repo.git

Credentials ?

- none -

+ Add

Save Apply



The screenshot shows the Jenkins Configuration page for a new job, continuing from the previous one. The left sidebar is the same. The main content area shows the 'Branches to build' section expanded. It contains a 'Branch Specifier (blank for 'any')' field with the value '\*/main'. Below this is an 'Add Branch' button. Further down is the 'Repository browser' section, which has a dropdown menu set to '(Auto)'. At the bottom of the configuration area are 'Save' and 'Apply' buttons.

jenkins Config [Jenkins] x +

localhost:8080/job/jenkins/configure

Dashboard > jenkins > Configuration

**Configure**

- General
- Triggers
- Pipeline**
- Advanced

Add Repository

Branches to build ?

Branch Specifier (blank for 'any') ?

\*/main

Add Branch

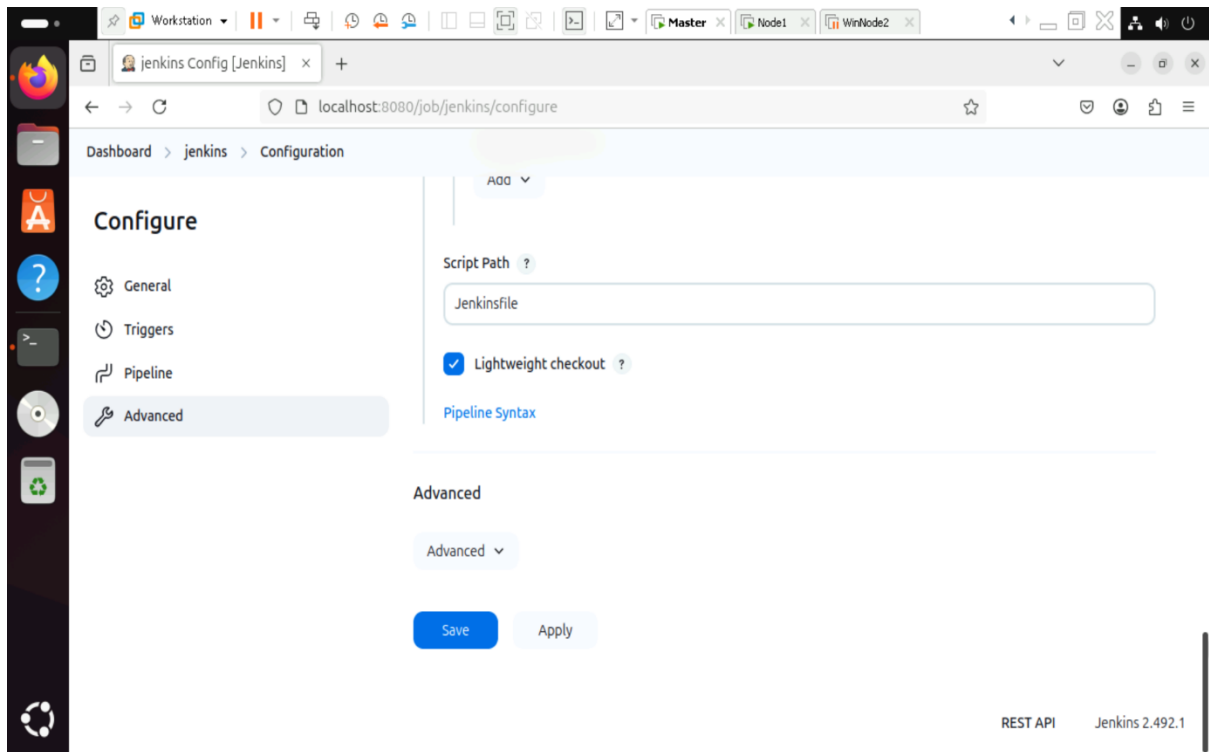
Repository browser ?

(Auto)

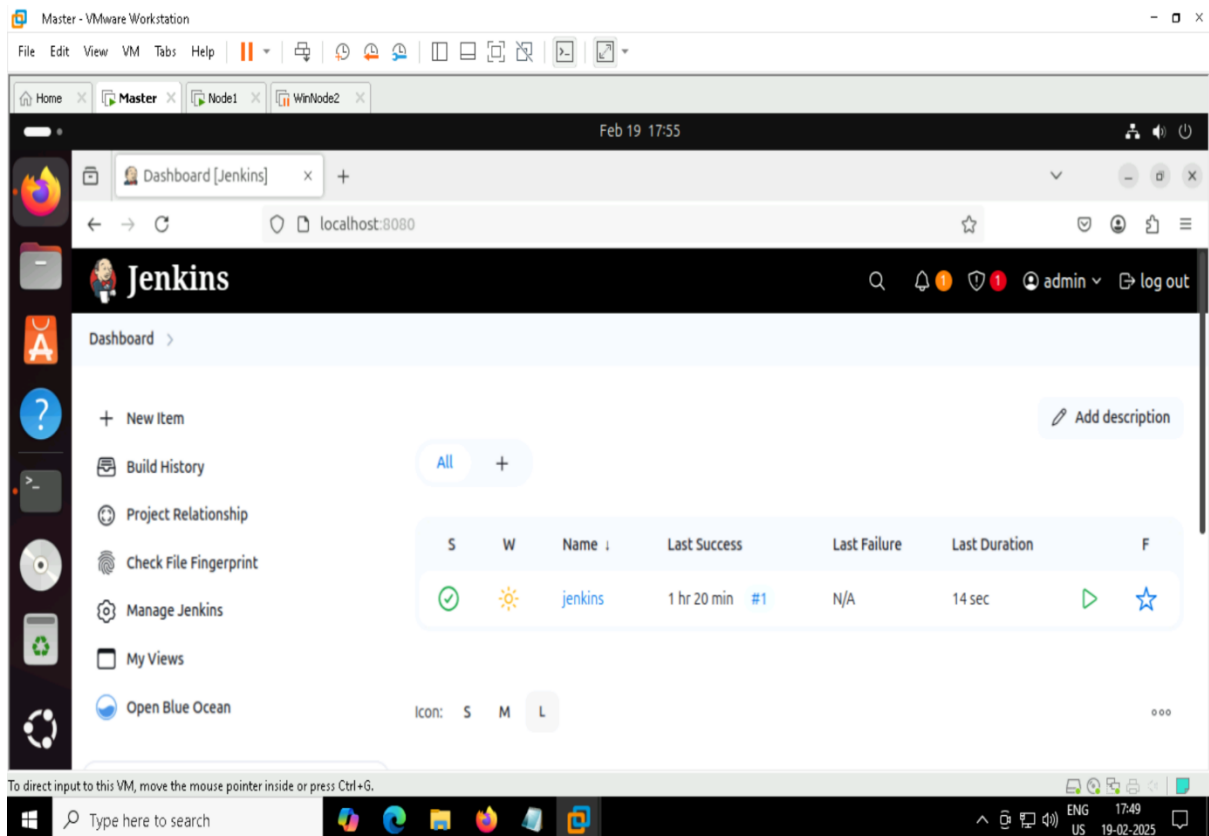
Additional Behaviours

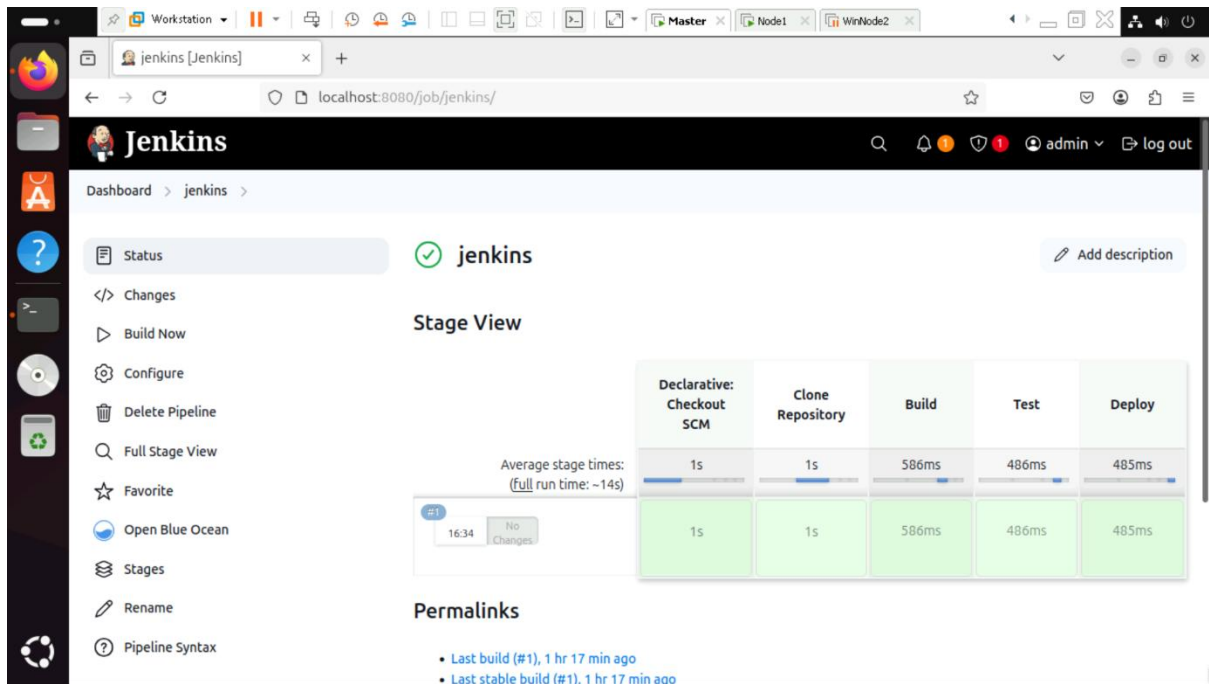
Add

Save Apply



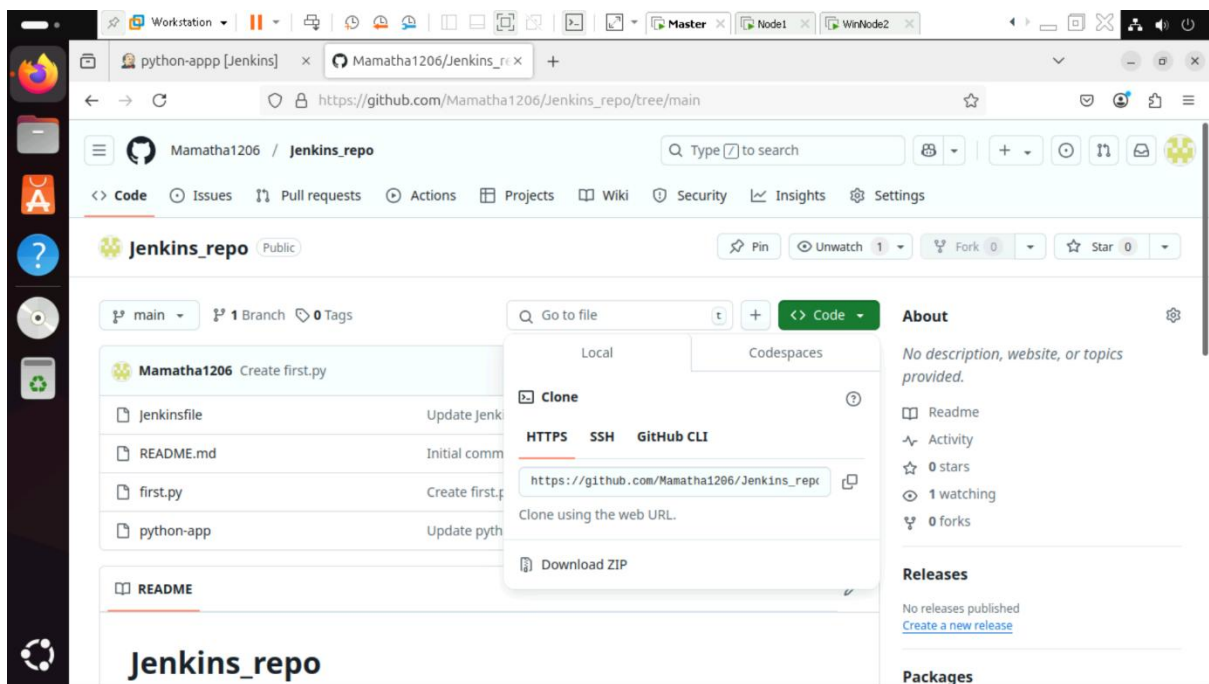
## Step 4: Build and Run the Jenkinsfile Pipeline



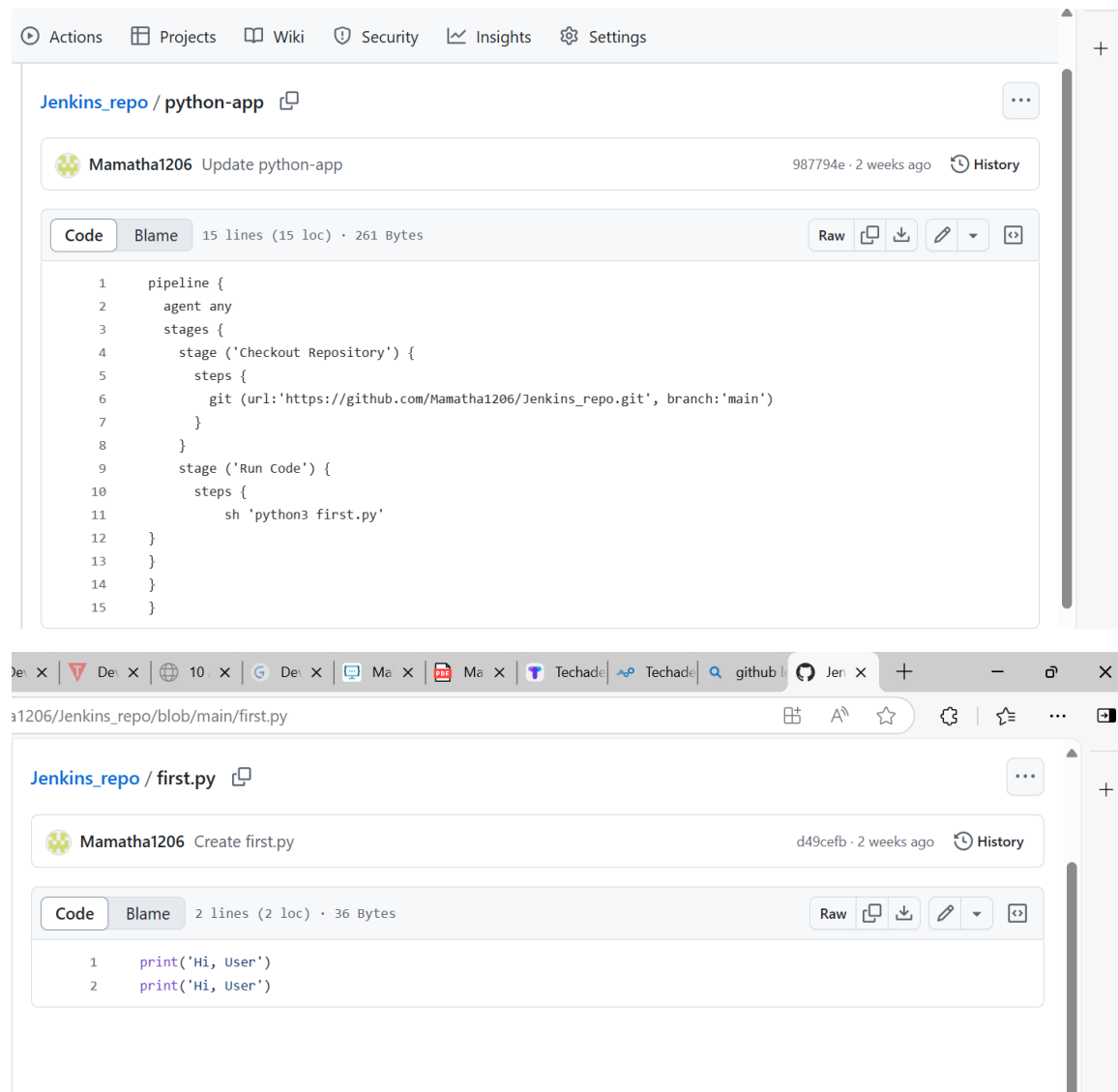


## 2. Automating a Python Application Build using Jenkins

Step 1: In GitHub repository, create a new files named python-app and first.py.



## Step 2: Add the following groovy code in the python-app.



The screenshot displays two GitHub repository pages. The top page shows the 'python-app' directory with a commit by Mamatha1206 titled 'Update python-app'. The code is a Jenkins pipeline script with 15 lines. The bottom page shows the 'first.py' file, also by Mamatha1206, with 2 lines of Python code.

**Jenkins\_repo / python-app**

Mamatha1206 Update python-app 987794e · 2 weeks ago History

Code Blame 15 lines (15 loc) · 261 Bytes

```
1 pipeline {
2   agent any
3   stages {
4     stage ('Checkout Repository') {
5       steps {
6         git (url:'https://github.com/Mamatha1206/Jenkins_repo.git', branch:'main')
7       }
8     }
9     stage ('Run Code') {
10      steps {
11        sh 'python3 first.py'
12      }
13    }
14  }
15 }
```

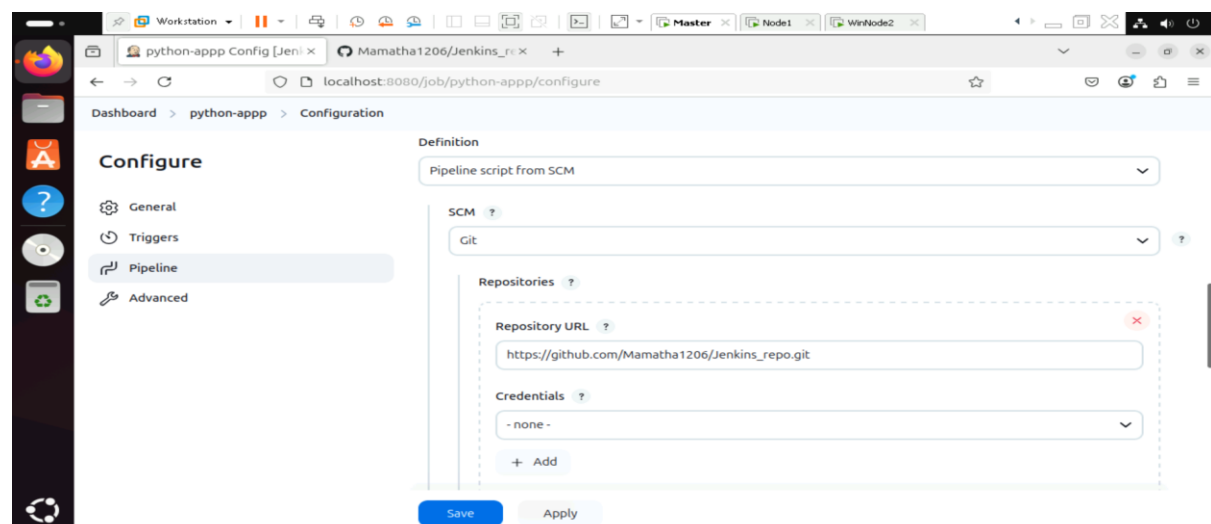
**Jenkins\_repo / first.py**

Mamatha1206 Create first.py d49cefb · 2 weeks ago History

Code Blame 2 lines (2 loc) · 36 Bytes

```
1 print('Hi, User')
2 print('Hi, User')
```

## Step 3: Create a new Jenkins Pipeline Job named python-apppp



The screenshot shows the Jenkins Configuration page for a job named 'python-apppp'. The 'Definition' section is set to 'Pipeline script from SCM'. The 'SCM' is set to 'Git'. A repository is added with the URL 'https://github.com/Mamatha1206/Jenkins\_repo.git' and credentials set to '- none -'. The 'Save' button is highlighted.

python-apppp Config [Jen] x Mamatha1206/Jenkins\_re x +

localhost:8080/job/python-apppp/configure

Dashboard > python-apppp > Configuration

**Configure**

- General
- Triggers
- Pipeline
- Advanced

**Definition**

Pipeline script from SCM

**SCM** ?

Git

**Repositories** ?

Repository URL ?

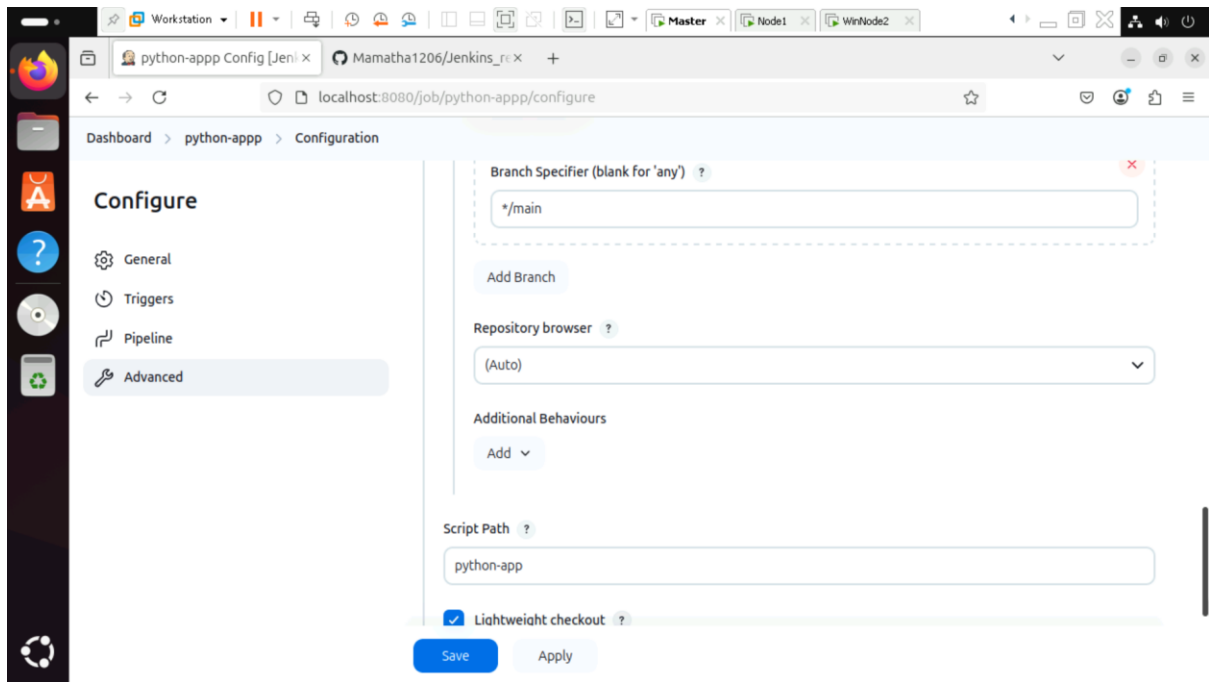
https://github.com/Mamatha1206/Jenkins\_repo.git

**Credentials** ?

- none -

+ Add

Save Apply



## Step 4: Build and Run the “python-app” Jenkins Pipeline

Dashboard > python-app >

### python-app

Add description

#### Stage View

Average stage times:  
(full run time: ~28s)

|                  | Declarative: Checkout SCM | Checkout Repository | Run Code |
|------------------|---------------------------|---------------------|----------|
| 14:13 No Changes | 13s                       | 2s                  | 897ms    |

#### Permalinks

- Full Stage View
- Full Pipeline View
- Full Build View
- Full Run View
- Full Test View
- Full Deploy View
- Full Archive View
- Full Cleanup View
- Full Post-build View