

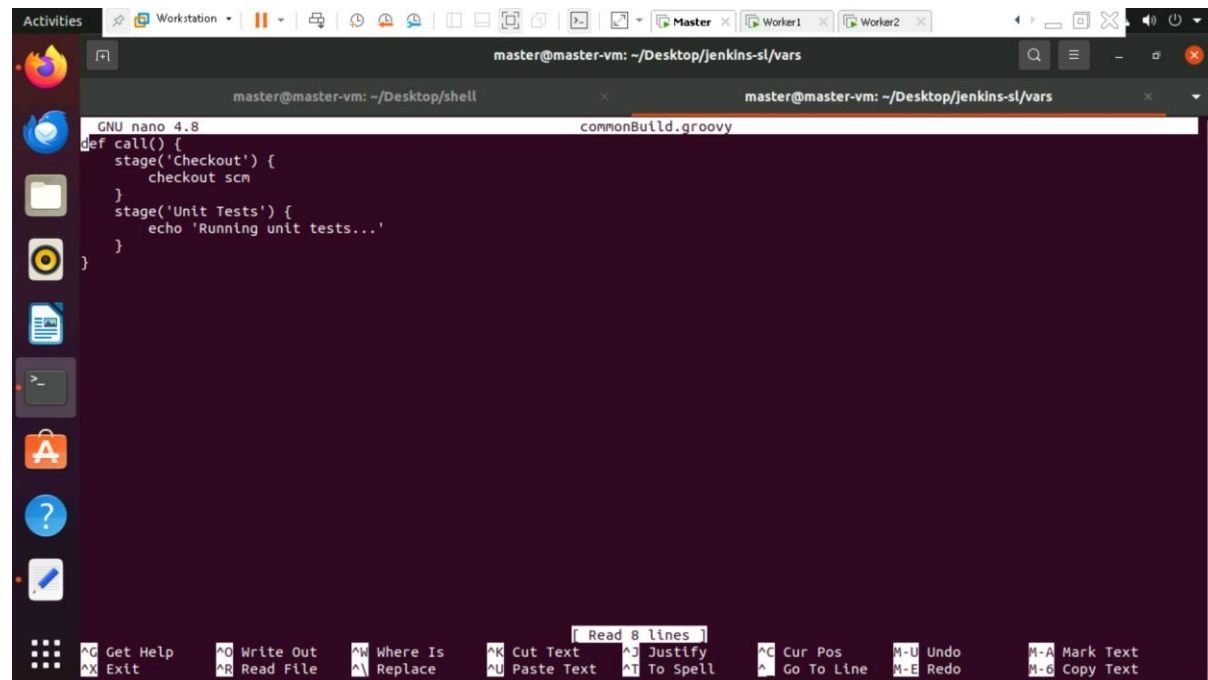
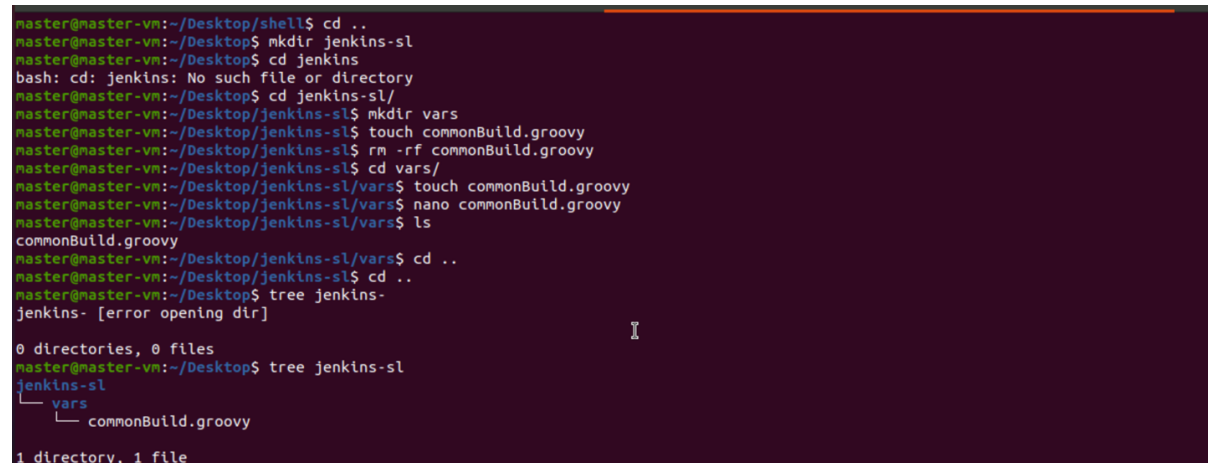
## Q. Creating and using shared library in Jenkins

[devops-commontrack-mocktest/question1](#) at main · KPkm25/devops-commontrack-mocktest

### 1. Create a folder Jenkins-sl to store the common libraries

```
master@master-vm:~/Desktop/shell$ cd ..
master@master-vm:~/Desktop$ mkdir jenkins-sl
master@master-vm:~/Desktop$ cd jenkins
bash: cd: jenkins: No such file or directory
master@master-vm:~/Desktop$ cd jenkins-sl/
master@master-vm:~/Desktop/jenkins-sl$ mkdir vars
master@master-vm:~/Desktop/jenkins-sl$ touch commonBuild.groovy
master@master-vm:~/Desktop/jenkins-sl$ rm -rf commonBuild.groovy
master@master-vm:~/Desktop/jenkins-sl$ cd vars/
master@master-vm:~/Desktop/jenkins-sl/vars$ touch commonBuild.groovy
master@master-vm:~/Desktop/jenkins-sl/vars$ nano commonBuild.groovy
master@master-vm:~/Desktop/jenkins-sl/vars$ ls
commonBuild.groovy
master@master-vm:~/Desktop/jenkins-sl/vars$ cd ..
master@master-vm:~/Desktop/jenkins-sl$ cd ..
master@master-vm:~/Desktop$ tree jenkins-
jenkins- [error opening dir]

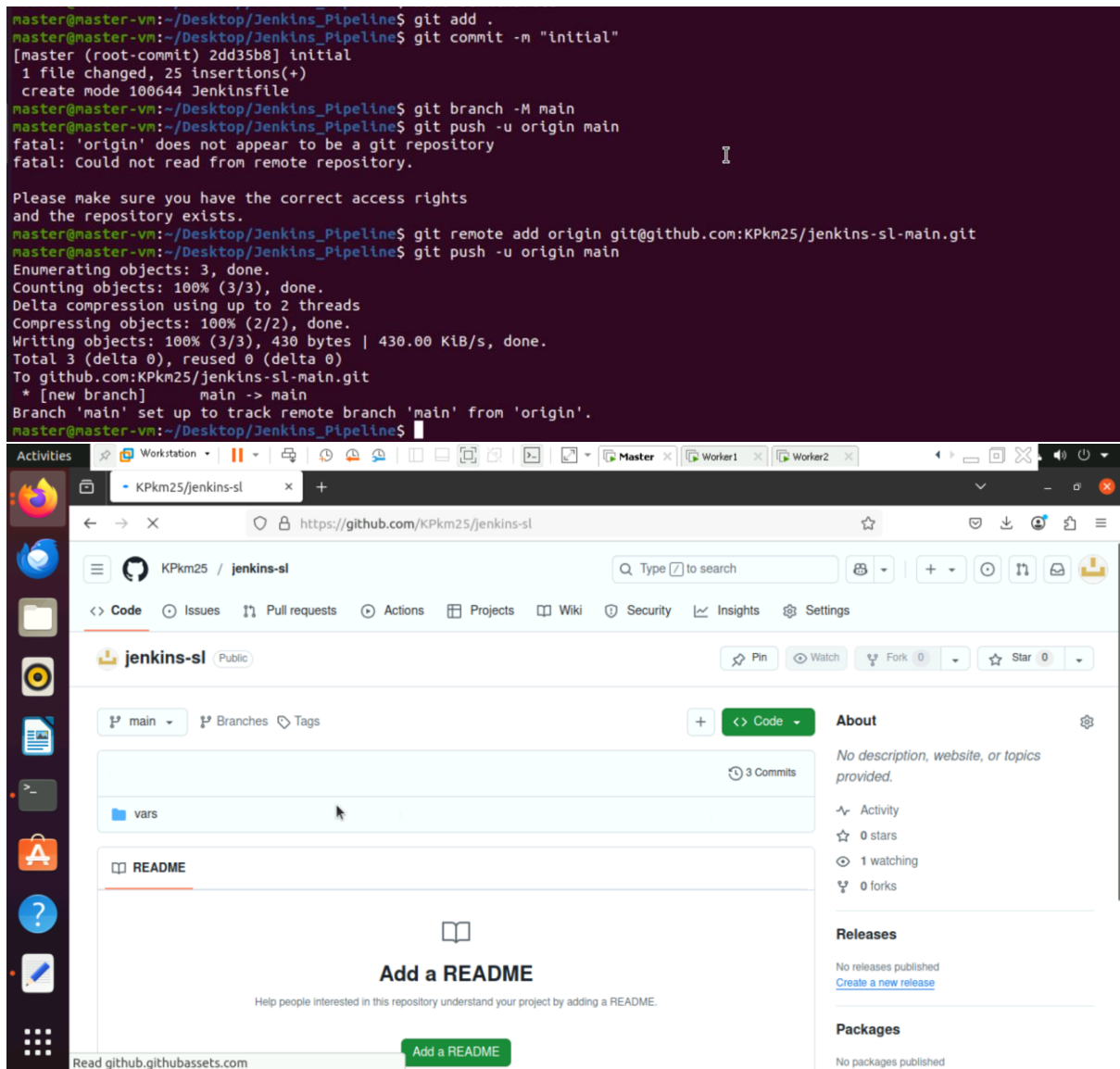
0 directories, 0 files
master@master-vm:~/Desktop$ tree jenkins-sl
jenkins-sl
├── vars
│   └── commonBuild.groovy
1 directory, 1 file
```



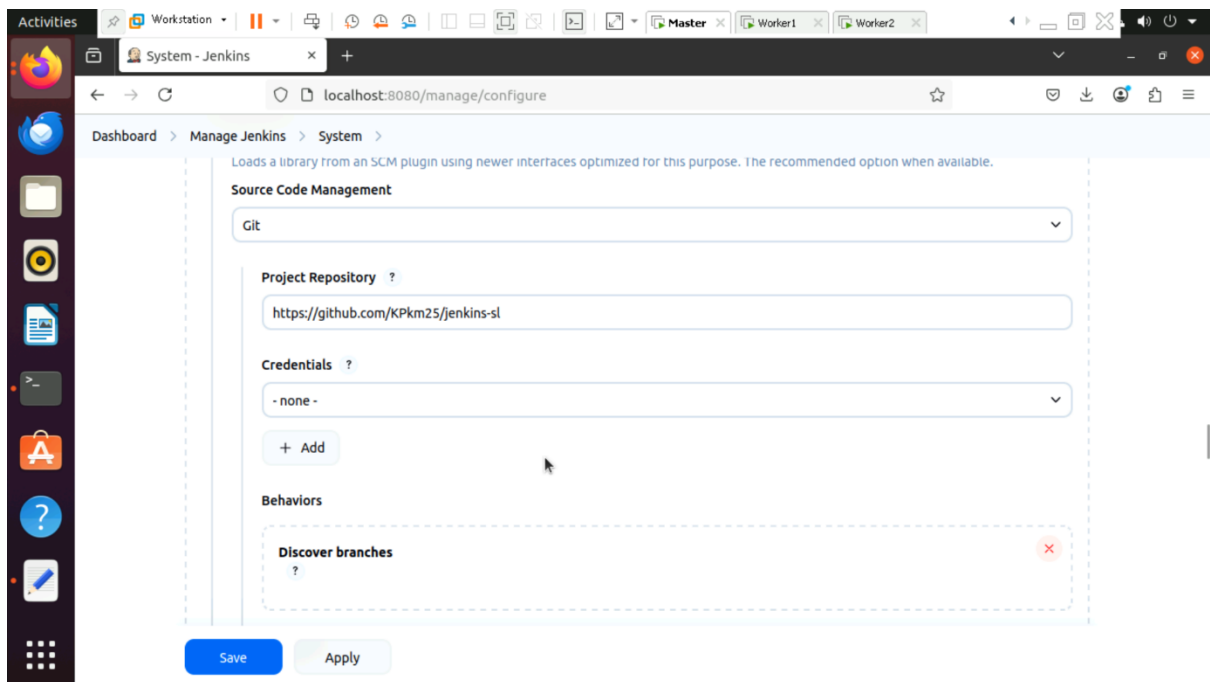
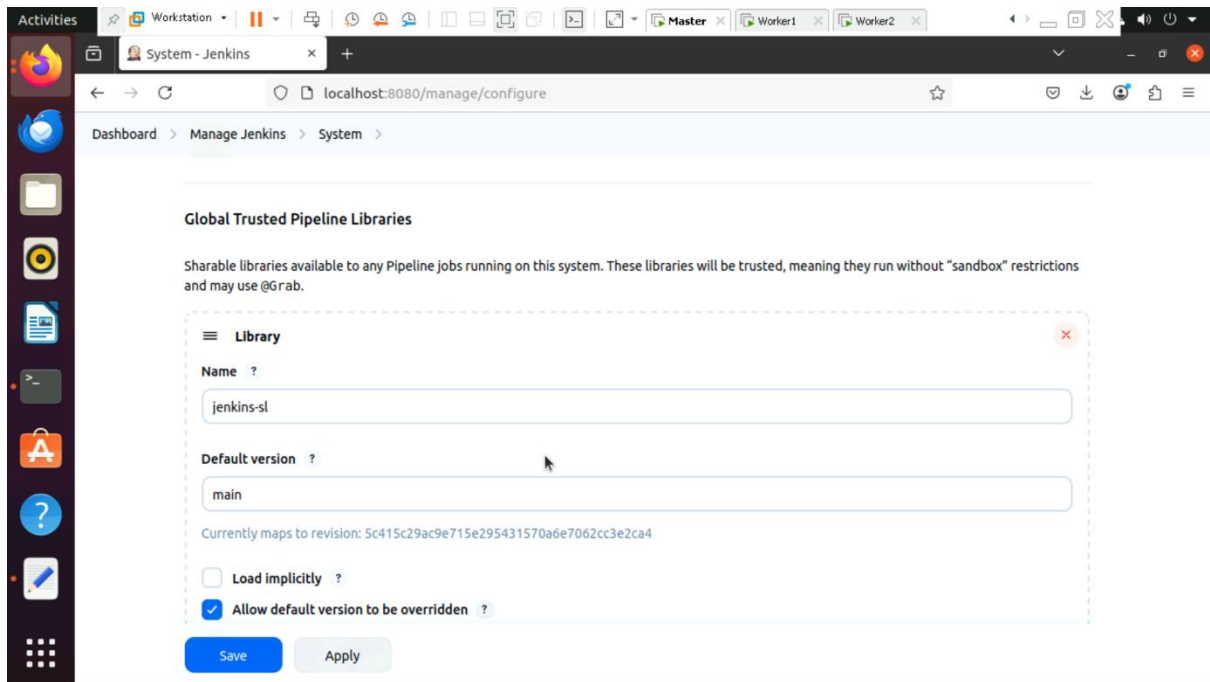
```
GNU nano 4.8 commonBuild.groovy
def call() {
    stage('Checkout') {
        checkout scm
    }
    stage('Unit Tests') {
        echo 'Running unit tests...'
    }
}
```

### 2. Create a repository Jenkins-sl on github and upload the shared libraries

[KPkm25/jenkins-sl](#)

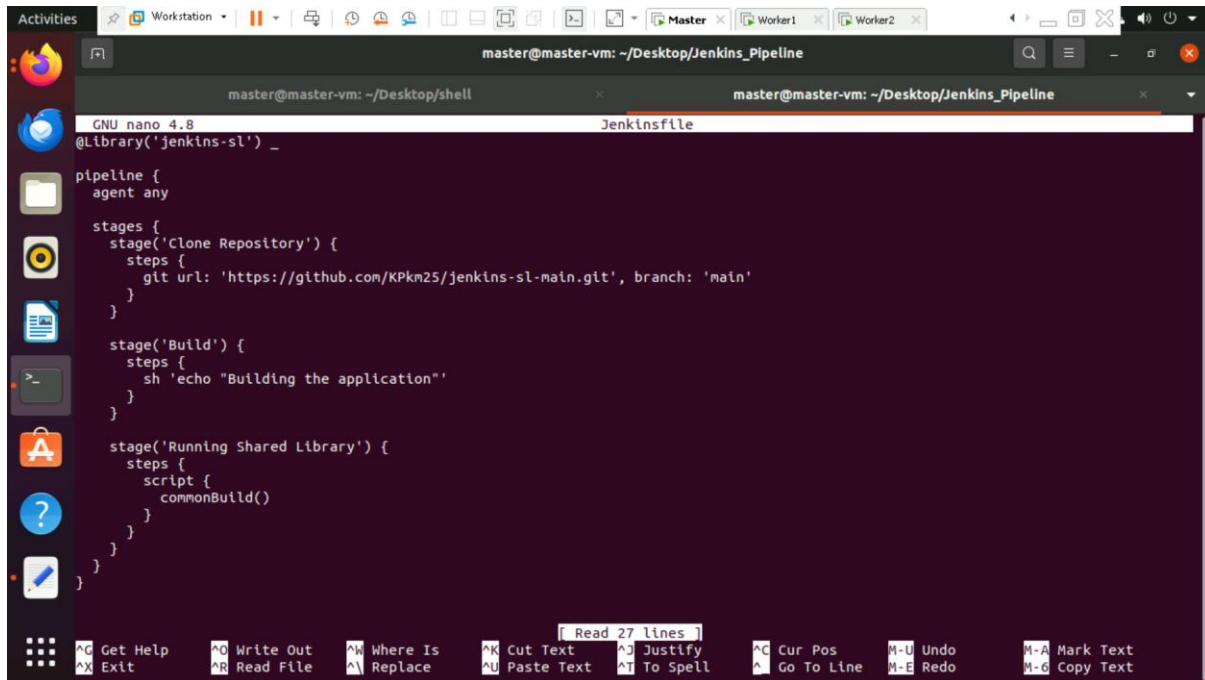


3. Add the shared library as a trusted global pipeline in Jenkins settings



4. Create a sample project which utilizes the Jenkins shared libraries and push it to Github.

[KPkm25/jenkins-sl-main](https://github.com/KPkm25/jenkins-sl-main)



The screenshot shows a terminal window with the nano text editor open, editing a file named Jenkinsfile. The file content defines a Jenkins pipeline with three stages: 'Clone Repository', 'Build', and 'Running Shared Library'. The 'Clone Repository' stage clones the repository from GitHub. The 'Build' stage runs a shell command to echo a message. The 'Running Shared Library' stage uses a script to call commonBuild(). The terminal window title is 'master@master-vm: ~/Desktop/Jenkins\_Pipeline'.

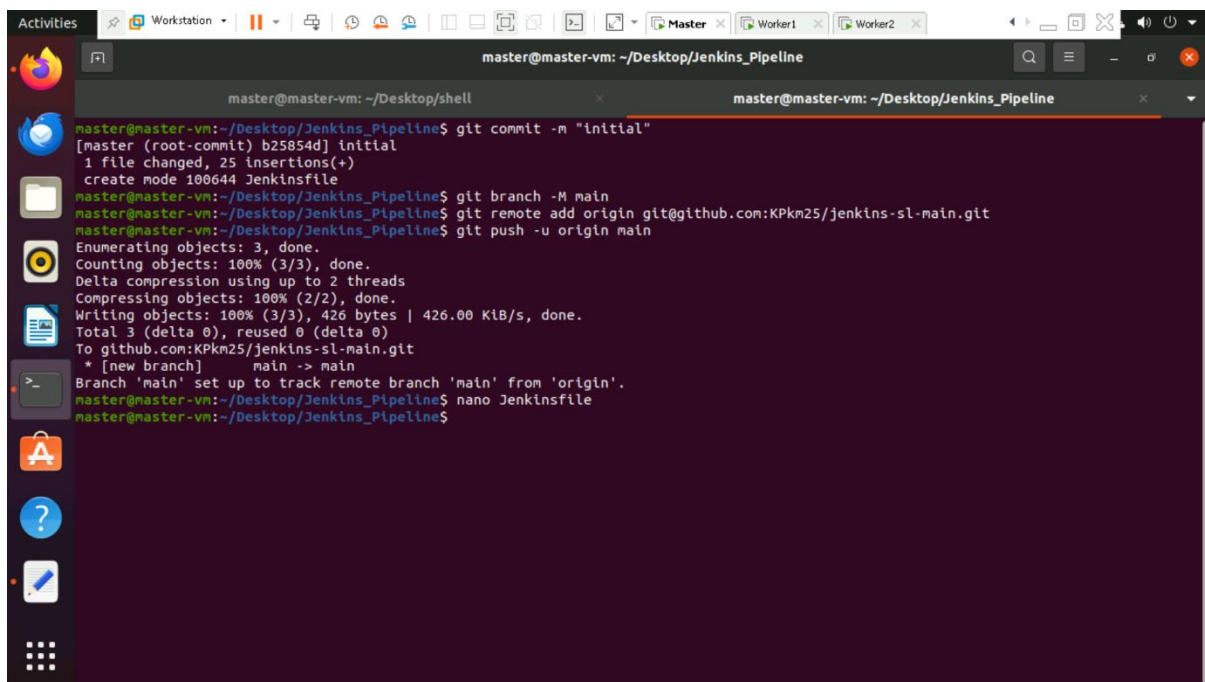
```
GNU nano 4.8 Jenkinsfile
@Library('jenkins-sl') _

pipeline {
  agent any

  stages {
    stage('Clone Repository') {
      steps {
        git url: 'https://github.com/KPkm25/jenkins-sl-main.git', branch: 'main'
      }
    }

    stage('Build') {
      steps {
        sh 'echo "Building the application"'
      }
    }

    stage('Running Shared Library') {
      steps {
        script {
          commonBuild()
        }
      }
    }
  }
}
```



The screenshot shows a terminal window with the following commands and output:

```
master@master-vm: ~/Desktop/Jenkins_Pipeline$ git commit -m "initial"
[master (root-commit) b25854d] initial
1 file changed, 25 insertions(+)
create mode 100644 Jenkinsfile
master@master-vm: ~/Desktop/Jenkins_Pipeline$ git branch -M main
master@master-vm: ~/Desktop/Jenkins_Pipeline$ git remote add origin git@github.com:KPkm25/jenkins-sl-main.git
master@master-vm: ~/Desktop/Jenkins_Pipeline$ git push -u origin main
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 2 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 426 bytes | 426.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To github.com:KPkm25/jenkins-sl-main.git
 * [new branch]    main -> main
Branch 'main' set up to track remote branch 'main' from 'origin'.
master@master-vm: ~/Desktop/Jenkins_Pipeline$ nano Jenkinsfile
master@master-vm: ~/Desktop/Jenkins_Pipeline$
```

## Q. Create and build the pipeline

Dashboard > jenkins-sl >

</> Changes

Build Now

Configure

Delete Pipeline

Full Stage View

Stages

Rename

Pipeline Syntax

### Stage View

Average stage times:  
(full run time: ~11s)

	Declarative: Checkout SCM	Clone Repository	Build	Running Shared Library	Checkout	Unit Tests
#3 15:13 1	1s	1s	596ms	623ms	1s	162ms
#2 15:12 No Changes	1s	1s	749ms	1s failed		
#1 15:10 No Changes						

### Permalinks

[Link build #3](#) [Link build #2](#) [Link build #1](#)