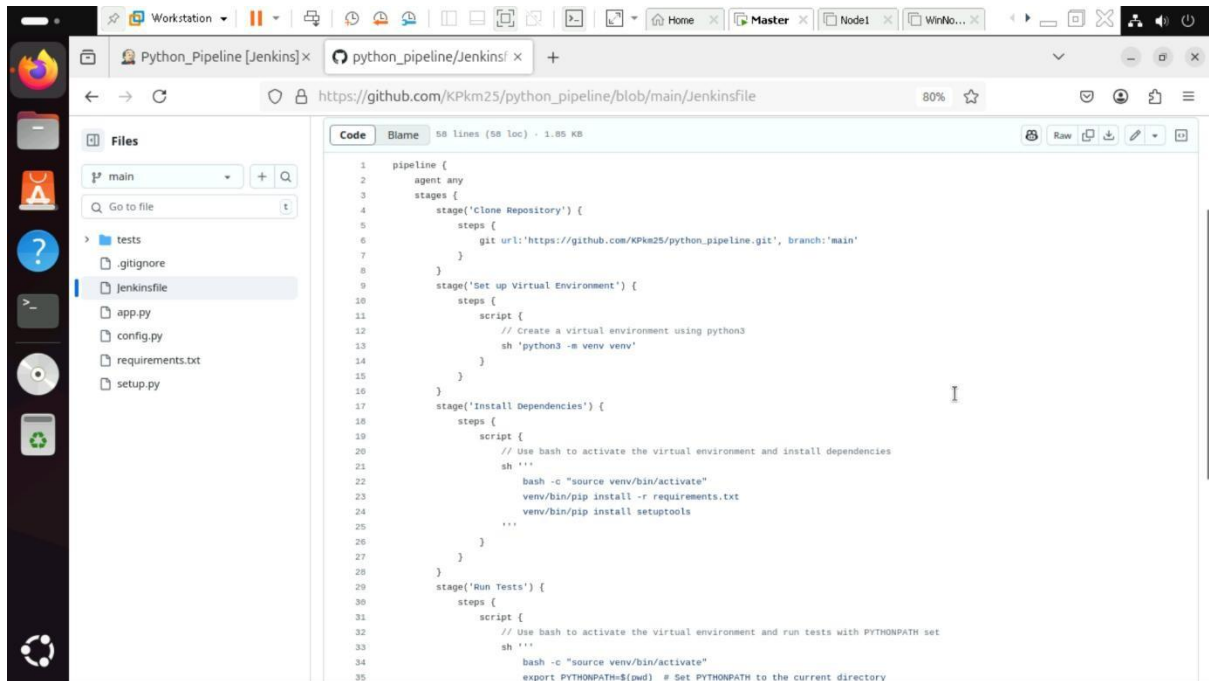


Assignment 2

Python Pipeline in Jenkins:



```
1 pipeline {
2   agent any
3   stages {
4     stage('Clone Repository') {
5       steps {
6         git url:'https://github.com/KPkm25/python_pipeline.git', branch:'main'
7       }
8     }
9     stage('Set up Virtual Environment') {
10      steps {
11        script {
12          // Create a virtual environment using python3
13          sh 'python3 -m venv venv'
14        }
15      }
16    }
17    stage('Install Dependencies') {
18      steps {
19        script {
20          // Use bash to activate the virtual environment and install dependencies
21          sh '''
22            bash -c "source venv/bin/activate"
23            venv/bin/pip install -r requirements.txt
24            venv/bin/pip install setuptools
25          '''
26        }
27      }
28    }
29    stage('Run Tests') {
30      steps {
31        script {
32          // Use bash to activate the virtual environment and run tests with PYTHONPATH set
33          sh '''
34            bash -c "source venv/bin/activate"
35            export PYTHONPATH=$(pwd) # Set PYTHONPATH to the current directory
```

Workstation Python_Pipeline [Jenkins] x python_pipeline/Jenkinsfile

https://github.com/KPkm25/python_pipeline/blob/main/Jenkinsfile 80%

Files

- main
- tests
- .gitignore
- Jenkinsfile
- app.py
- config.py
- requirements.txt
- setup.py

```
python_pipeline / Jenkinsfile
28 }
29 stage('Run Tests') {
30     steps {
31         script {
32             // Use bash to activate the virtual environment and run tests with PYTHONPATH set
33             sh '''
34                 bash -c "source venv/bin/activate"
35                 export PYTHONPATH=$(pwd) # Set PYTHONPATH to the current directory
36                 venv/bin/pytest tests/
37             '''
38         }
39     }
40 }
41 stage('Build Artifact') {
42     steps {
43         script {
44             // Use bash to activate the virtual environment and build the artifact
45             sh '''
46                 bash -c "source venv/bin/activate"
47                 venv/bin/python setup.py sdist
48             '''
49         }
50     }
51 }
52 stage('Archive Artifact') {
53     steps {
54         archiveArtifacts artifacts: 'dist/*.tar.gz', fingerprint: true
55     }
56 }
57 }
58 }
```

Workstation Python_Pipeline [Jenkins] x python_pipeline/Jenkinsfile

localhost:8080/job/Python_Pipeline/

Jenkins

Dashboard > Python_Pipeline >

Status Python_Pipeline Add description

Changes

Build Now

Configure

Delete Pipeline

Full Stage View

Favorite

Open Blue Ocean

Stages

Rename

Pipeline Syntax

Last Successful Artifacts

flask_app-0.1.0.tar.gz 1.39 KiB view

Stage View

Average stage times: (full run time: ~21s)

	Declarative: Checkout SCM	Clone Repository	Set up Virtual Environment	Install Dependencies	Run Tests	Build Artifact
#14 Feb 20 12:10 1 commit	1s	1s	4s	6s	3s	1s
#13 Feb 20 12:10 1 commit	1s	1s	6s	3s	2s	524ms