Q. Jenkins pipeline


```
pipeline {
    agent any

    stages {
        stage('Clone Repository') {
            steps {
                // Explicitly specify the branch you want to checkout
                git url: 'https://github.com/KPkm25/Jenkins_Pipeline.git', branch: 'main'  // or 'master' if that's your defa
            }
        }

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

        stage('Test') {
            steps {
                sh 'echo "Running tests..."'
            }
        }

        stage('Deploy') {
            steps {
                sh 'echo "Deploying application"'
            }
        }
    }
}
```

Top screenshot (Dashboard):

Workstation

Master | Node1 | WinNode2

Dashboard [Jenkins] | Jenkins_Pipeline/Jenkins | Git Repository Connectio | +

localhost:8080

Jenkins

admin | log out

Dashboard

+ New Item

Build History

Project Relationship

Check File Fingerprint

Manage Jenkins

My Views

Open Blue Ocean

Add description

All | +

S	W	Name ↓	Last Success	Last Failure	Last Duration	F
✓	☁	Trial _Pipeline	2 hr 12 min #7	2 hr 16 min #6	9.3 sec	▷ ☆

Icon: S M L

Build Queue

No builds in the queue.

Build Executor Status

Built-In Node   0/2

Bottom screenshot (Trial_Pipeline):

Workstation

Master | Node1 | WinNode2

Trial_Pipeline [Jenkins] | Jenkins_Pipeline/Jenkins | Git Repository Connectio | +

localhost:8080/job/Trial_Pipeline/

Jenkins

admin | log out

Dashboard > Trial_Pipeline

Status

Changes

Build Now

Configure

Delete Pipeline

Full Stage View

Favorite
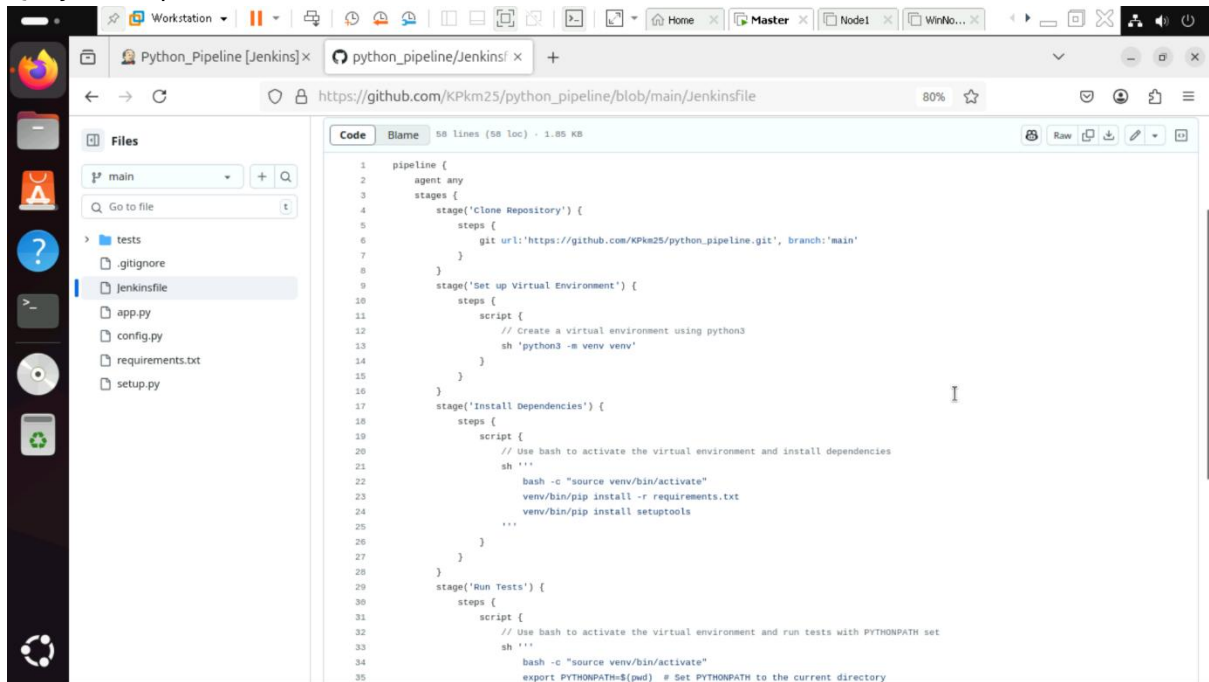
Open Blue Ocean

Stages

Rename

Pipeline Syntax

✓ Trial_Pipeline

Add description

Stage View

	Declarative: Checkout SCM	Clone Repository	Build	Test	Deploy
Average stage times: (full run time: ~9s)	1s	1s	637ms	427ms	448ms
#7 15:32 1	1s	1s	782ms	661ms	728ms
#6 15:28 No Changes					
#5					

Assignment 2

Q. Python Pipeline in Jenkins

GitHub — 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  }
```

Jenkins — Python_Pipeline

Dashboard > Python_Pipeline

Python_Pipeline

Last Successful Artifacts
flask_app-0.1.0.tar.gz   1.39 KiB   view

Stage View

	Declarative: Checkout SCM	Clone Repository	Set up Virtual Environment	Install Dependencies	Run Tests	Build Artifact
Average stage times: (full run time: ~21s)	1s	1s	4s	3s	1s	260ms
#14 Feb 20 12:10	1s	1s	4s	6s	3s	1s
#13 Feb 20	1s	1s	6s	3s	2s	524ms