

```

nandhu2645@LAPTOP-1TVBN:~$ sudo apt update
sudo apt install openssh-server
Ign:1 https://pkg.jenkins.io/debian-stable binary/ InRelease
Hit:2 https://pkg.jenkins.io/debian-stable binary/ Release
Hit:4 http://archive.ubuntu.com/ubuntu noble InRelease
Get:5 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:6 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:7 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [671 kB]
Get:8 http://archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:9 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [922 kB]
Get:10 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [8960 B]
Get:11 http://security.ubuntu.com/ubuntu noble-security/main amd64 c-n-f Metadata [6936 B]
Get:12 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [820 kB]
Get:13 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Components [151 kB]
Get:14 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [177 kB]
Get:15 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 c-n-f Metadata [13.5 kB]
Get:16 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [1041 kB]
Get:17 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [51.9 kB]
Get:18 http://security.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [17.0 kB]
Get:19 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Components [208 B]
Get:20 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [208 B]
Get:21 http://archive.ubuntu.com/ubuntu noble-updates/universe Translation-en [262 kB]
Get:22 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [364 kB]
Get:23 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 c-n-f Metadata [25.9 kB]
Get:24 http://archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Components [212 B]
Get:25 http://archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [940 B]
Get:26 http://archive.ubuntu.com/ubuntu noble-backports/main Translation-en [2588 B]
Get:27 http://archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [208 B]
Get:28 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 Packages [14.6 kB]
Get:29 http://archive.ubuntu.com/ubuntu noble-backports/universe Translation-en [14.6 kB]
Get:30 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [20.0 kB]
Get:31 http://archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [212 B]
Get:32 http://archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
Fetched 4965 kB in 5s (957 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
90 packages can be upgraded. Run 'apt list --upgradable' to see them.

```

```

nandhu2645@LAPTOP-1TVBN:~$ sudo systemctl restart ssh
nandhu2645@LAPTOP-1TVBN:~$ sudo systemctl status ssh
● ssh.service - OpenBSD Secure Shell server
   Loaded: loaded (/usr/lib/systemd/system/ssh.service; disabled; preset: enabled)
   Active: active (running) since Fri 2025-03-21 05:47:47 UTC; 7s ago
 TriggeredBy: ● ssh.socket
            Docs: man:sshd(8)
                  man:sshd_config(5)
   Process: 1666 ExecStartPre=/usr/sbin/sshd -t (code=exited, status=0/SUCCESS)
  Main PID: 1667 (sshd)
    Tasks: 1 (limit: 4576)
   Memory: 1.2M ( )
   CGroup: /system.slice/ssh.service
            └─1667 "sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups"

Mar 21 05:47:47 LAPTOP-1TVBN systemd[1]: Starting ssh.service - OpenBSD Secure Shell server...
Mar 21 05:47:47 LAPTOP-1TVBN sshd[1667]: Server listening on :: port 22.
Mar 21 05:47:47 LAPTOP-1TVBN systemd[1]: Started ssh.service - OpenBSD Secure Shell server.
nandhu2645@LAPTOP-1TVBN:~$ ls /etc/systemd/system/sshd.service or ls /usr/lib/systemd/system/sshd.service
ls: cannot access '/etc/systemd/system/sshd.service': No such file or directory
ls: cannot access 'or': No such file or directory
ls: cannot access '/usr/lib/systemd/system/sshd.service': No such file or directory
nandhu2645@LAPTOP-1TVBN:~$ ls /etc/systemd/system/sshd.servic
ls: cannot access '/etc/systemd/system/sshd.servic': No such file or directory
nandhu2645@LAPTOP-1TVBN:~$ ls /usr/lib/systemd/system/sshd.service
ls: cannot access '/usr/lib/systemd/system/sshd.service': No such file or directory
nandhu2645@LAPTOP-1TVBN:~$ sudo systemctl daemon-reload
nandhu2645@LAPTOP-1TVBN:~$ sudo systemctl status ssh
● ssh.service - OpenBSD Secure Shell server
   Loaded: loaded (/usr/lib/systemd/system/ssh.service; disabled; preset: enabled)
   Active: active (running) since Fri 2025-03-21 05:47:47 UTC; 1min 39s ago
 TriggeredBy: ● ssh.socket
            Docs: man:sshd(8)
                  man:sshd_config(5)
   Main PID: 1667 (sshd)
    Tasks: 1 (limit: 4576)
   Memory: 1.2M ( )

```

```
nandhu2645@LAPTOP-1TVBND2B:~$ minikube start
🐳 minikube v1.35.0 on Ubuntu 24.04 (amd64)
🔧 Using the docker driver based on existing profile
👉 Starting "minikube" primary control-plane node in "minikube" cluster
📶 Pulling base image v0.0.46 ...
🔄 Restarting existing docker container for "minikube" ...
💡 StartHost failed, but will try again: provision: get ssh host-port: get port 22 for "minikube": docker container inspect -f '{{(index (index .NetworkSettings.Ports "22/tcp") 0).HostPort}}' minikube: exit status 1
stdout:

stderr:
template parsing error: template: :14: executing "" at <index (index .NetworkSettings.Ports "22/tcp") 0>: error calling index: reflect: slice index out of range

🌟 Updating the running docker "minikube" container ...
📦 Preparing Kubernetes v1.32.0 on Docker 27.4.1 ...
🔍 Verifying Kubernetes components...
  ▪ Using image gcr.io/k8s-minikube/storage-provisioner:v5
🔧 Enabled addons: storage-provisioner, default-storageclass
👉 Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
E0321 06:17:00.796627 6054 logFile.go:53] failed to close the audit log: invalid argument
nandhu2645@LAPTOP-1TVBND2B:~$ cd ~/.kube
nandhu2645@LAPTOP-1TVBND2B:~/.kube$ sudo vi config
[sudo] password for nandhu2645:
nandhu2645@LAPTOP-1TVBND2B:~/.kube$ kubectl get node
NAME      STATUS   ROLES    AGE   VERSION
minikube  Ready   control-plane  14h   v1.32.0
nandhu2645@LAPTOP-1TVBND2B:~/.kube$
```

```
nandhu2645@LAPTOP-1TVBND2B:~/.kube$ sudo visudo
[sudo] password for nandhu2645:
nandhu2645@LAPTOP-1TVBND2B:~$ sudo systemctl restart ssh
nandhu2645@LAPTOP-1TVBND2B:~$ cd ~/.kube
nandhu2645@LAPTOP-1TVBND2B:~/.kube$ ls
cache config
nandhu2645@LAPTOP-1TVBND2B:~/.kube$ sudo vi config
nandhu2645@LAPTOP-1TVBND2B:~/.kube$ cat /home/nandhu2645/.minikube/ca.crt | base64 -w 0; echo
LS0tLS1CRUdJTiBDRVJUSUJzQ0FURS0tLS0tCk1JSURCakNDQWU2Z0F3SUJBZ0lCQVBRBkTjNa3Foa2lHOXcwQkFRc0ZBREFFMTVJN0VVRWURWUVFERXdwGdGFNNXAKYTNWVpVtKJNQjRYRFRJMU1ETXhpRE0tMwFmU0xb1hEVE0xTURNRE56QTRNakUxTTFvd0ZURVRN0kVHQTFVRQ0pBeE1lYlZldmFkdFZvZEVURDQ0FTSXdEUVlKS29aSWh2Y05BUUVCQ1FBRGdnRVBIBRENDQVFvZ2dnRUJBT1lXCNFMFRlRlMwSSY29idTJzQnVpSj10dHBkd0R2MmNnNkXEW0t5VU1Ub1NjUndrZmlsRXJkMbVhDK0ZNRVhYMXVpVU8KYkFkb3o1TUJ4dG01Mmtid2JYekJVVHhXczFKSnb3YjYF6WZGpTjX3VWVhZVBkQmXSSTd4S11yV0hXZDRlQ3F2Q0g0dWUxka2o3ZjR3RytrQUXVhKZENNNE1RaF3hNkF4L25CTWl0U2c0ZGybmhZUFFVlIudlBFFeno1Q29NVkl1e1IzCmV2QTI0dzJ6Umx2a0lmaDk2dE1sRDZWR1F0dMwcc3oyTU9ien1IyFIU3BVdEprTjM5Vz3CeFE2VXpEiUhhNcGYKSkeZWTJ4MTNkUET4ZnpWUtK5N2ZVhHhZpMmxHbk5KUMNHZK3PNE00RWFlyFmHaERcck5UaG90VVRvZ2xwPEk3cwpkY216ZGZrUmw1QUZWMpS5LzgwQ0F3RUFBYU5oTUy4d0RnWURWUjBQVVFIL0JBUURBZ0trTUIwR0ExVWRKUVFXck1CUUdDQ3NHQVFVRkZ3TUNCZ2dyQmdFRk3JRYORBEVEQ0md0VhTSUJBJzJhF0RBRFRSC9NQjBHQTFVZERnUvcKQkRanJlLTJlTjA1F0tZRUHFRWV0Vkc2ZG1xNkNkQU5CZ2t2aGtpRz13MEJBUXNGQUFQ0FRFRUJNmd0YTY1Y2wPDT2FocGpud3FySk1uSE1Qc1h1UTVDV0Ivc2JYYkhkZmZlUm1PRy9tOFVITGJCeTnyTHBHMWV2ZiXtXjd4ZDJFCl1cXUaSS5bFBPY1VuQ2Z0bFJza1l1QW0yQz1USU1SN2FSeE1KWE92K0w2RGVmd0h0UCtDT2NvUG9yeV1pdWUKK2hXemV0eU1GdjiYUXBJT0h4ZGdBC1VRZD1CRn1KUX1WGSZmeHlhwLRTmkvVXpXTnRnSkNwFVLMG1CUjNQdwdpod05hQKRgK3hITDBtVUNzVzBUYtKwUyTld2h3VjGd1d6QktuVU1uQ2VHkddRT1VMR285cmpZ7HE1VnVWRTJvcMmVXhnlMwPjZTkwUe1jYTI4ajYxd0ZzajJNOGQWmhrVGdhS3ZyLhQ1ZmtoL0xNlaHRESdVKTtDdMhK4dGJF5VEKU1plamZCwKNoT3czVx9PQotLS0tLUVORCBDRVJUSUJzQ0FURS0tLS0tCg==
nandhu2645@LAPTOP-1TVBND2B:~/.kube$ cat /home/nandhu2645/.minikube/profiles/minikube/client.crt | base64 -w 0; echo
LS0tLS1CRUdJTiBDRVJUSUJzQ0FURS0tLS0tCk1JSURJVENQdWdtZ0F3SUJBZ0lCQVBRBkTjNa3Foa2lHOXcwQkFRc0ZBREFFMTVJN0VVRWURWUVFERXdwGdGFNNXAKYTNWVpVtKJNQjRYRFRJMU1ETXhpVEUyTjB0eU1hEVEk0tURNRE56QTRNakUxTTFvd0ZURVRN0kVHQTFVRQ0pBeE1PYzNsemRiVnRpBTf0YzNSbGnuTXhGakFVQmd0VkJBTvREvZwYm1scmRXSxMwMFZ6W1hJd2dnRw1NQTBHCnRtCldTSMWzRFFQkFRVUwBNE1CRHdBd2dnRUtBb0lCQVFEZE8yM1NRc0t01N1hHnV5ZjdaNw1lVknRUUR2TjMKSFRiMgPLN2h0Ykx4a09WV1B0S3UzFzV0RtLaTVmCWExtJjUwa1lsN2F6mIvQW90V21OTy93ck12RUTRnN0S0pjiYRpcEFxagZYyK1M2NGU0t4Rn1ZRGhSNhNS2xoQWgyMwP2L05yQndzKwMJaRGdJszRlakZyWUJmZKvjZ3CmR3dGdnV3Ft61JQMEVjSx01NmV2Gxue1dWemF2d1hZbc3YXhUNgtxU1hYVS9XdjRhde1DNIE5pr2gvQW1MwUkV1RRCUvXs9aVjBo0Eh5S5zFrUmlJaQUFkaG1nZ3JaYjg0ekZMTG91ZWIyQzBNdnkVWEzdu1Hhcjh5UfNma3hzWgp1VEgrTwhFVhHJL21TVkx5N1NwFpuRHZESmc5S1hwbzVrY0RRRnBweUphc08S5U29Mm1hYVRnaEFnTUJBJ0dQdCl1EgQmVnQTRHQTFVZER3RUIvdF1FQXdxJm9EQRKRCZ0S5FNVRUZQVVCZ2dyQmdFRk3JYORBUV1J3S3dZQk3RVUgKQXkJd0RBMURWUjBUQVFIL0JBSXdBREFFmQmd0VkhTUVHREFFXZ0JRanJlLTJlTjA1F0tZRUHFRWV0Vkc2ZG1xNkgpDakFOQmdrcCwraA5c2dBCQVFzRkFBT0NBUBVR0VQNGEvZ1k3MXF5Nng3dFBFL0xsQ1FyEzMRjN6WVFXTHkCnd4dG10MmFwOEqrMnFISW9qZnYrEFCNmdMMgMnKk1JZDRUZ2pGK313aXNLVmxkSjIxc1NVY3Bnb0QyN1VY3UKdmt3Y3hmSkpSb3YvNWZU0tIcy93L0xjenY5c2VR5jRmGZjVGRxyY1VZc090TW9hR31raDRqU3ZMeFJ3ZkNMWkpIdHg2c6C4QUiXt1d0K2hWcGxDeHNQVTF6Gh1aHNSL2dMbEzJ3011MGxLzY5K0RtVDdRNeXhMfGvQJ1JmMmptCkH6cS0RFEgxbUUMML31rWGVIT0Y5ZFRTa3ZyaHkrSEwemVzSG6kT9FdcScrcGE3TnppUCs0ckRITVRNMFJyZTEKEldpQ08FFmZa3cB9sMhma0UM0v2dnQ1ZS20NQYUpHWH13WFZeb0dtQ9HQVI3UzVGRGc9PQotLS0tLUVORCBDRVJUSUJzQ0FURS0tLS0tCg==
nandhu2645@LAPTOP-1TVBND2B:~/.kube$ cat /home/nandhu2645/.minikube/profiles/minikube/client.key | base64 -w 0; echo
LS0tLS1CRUdJTiB0eU90V21OTy93ck12RUTRnN0S0pjiYRpcEFxagZYyK1M2NGU0t4Rn1ZRGhSNhNS2xoQWgyMwP2L05yQndzKwMJaRGdJszRlakZyWUJmZKvjZ3CmR3dGdnV3Ft61JQMEVjSx01NmV2Gxue1dWemF2d1hZbc3YXhUNgtxU1hYVS9XdjRhde1DNIE5pr2gvQW1MwUkV1RRCUvXs9aVjBo0Eh5S5zFrUmlJaQUFkaG1nZ3JaYjg0ekZMTG91ZWIyQzBNdnkVWEzdu1Hhcjh5UfNma3hzWgp1VEgrTwhFVhHJL21TVkx5N1NwFpuRHZESmc5S1hwbzVrY0RRRnBweUphc08S5U29Mm1hYVRnaEFnTUJBJ0dQdCl1EgQmVnQTRHQTFVZER3RUIvdF1FQXdxJm9EQRKRCZ0S5FNVRUZQVVCZ2dyQmdFRk3JYORBUV1J3S3dZQk3RVUgKQXkJd0RBMURWUjBUQVFIL0JBSXdBREFFmQmd0VkhTUVHREFFXZ0JRanJlLTJlTjA1F0tZRUHFRWV0Vkc2ZG1xNkgpDakFOQmdrcCwraA5c2dBCQVFzRkFBT0NBUBVR0VQNGEvZ1k3MXF5Nng3dFBFL0xsQ1FyEzMRjN6WVFXTHkCnd4dG10MmFwOEqrMnFISW9qZnYrEFCNmdMMgMnKk1JZDRUZ2pGK313aXNLVmxkSjIxc1NVY3Bnb0QyN1VY3UKdmt3Y3hmSkpSb3YvNWZU0tIcy93L0xjenY5c2VR5jRmGZjVGRxyY1VZc090TW9hR31raDRqU3ZMeFJ3ZkNMWkpIdHg2c6C4QUiXt1d0K2hWcGxDeHNQVTF6Gh1aHNSL2dMbEzJ3011MGxLzY5K0RtVDdRNeXhMfGvQJ1JmMmptCkH6cS0RFEgxbUUMML31rWGVIT0Y5ZFRTa3ZyaHkrSEwemVzSG6kT9FdcScrcGE3TnppUCs0ckRITVRNMFJyZTEKEldpQ08FFmZa3cB9sMhma0UM0v2dnQ1ZS20NQYUpHWH13WFZeb0dtQ9HQVI3UzVGRGc9PQotLS0tLUVORCBDRVJUSUJzQ0FURS0tLS0tCg==
nandhu2645@LAPTOP-1TVBND2B:~/.kube$
```

← → ↻ localhost:8080/manage/cloud/create ☆

Dashboard > Manage Jenkins > Clouds > New cloud

☐ Disable https certificate check ?

Kubernetes Namespace

Agent Docker Registry ?

☐ Inject restricted PSS security context in agent container definition ?

Credentials

config ▼

+ Add

Connected to Kubernetes v1.32.0

Test Connection

PIPELINE:

```

pipeline {
    agent any

    stages {
        stage('scm') {
            steps {
                git branch: 'master', url:'https://github.com/nandhu6804/devops_main.git'
            }
        }
        stage('builb-clean') {
            steps {
                sh "mvn clean"
            }
        }
    }
}

```

```
stage('build-validate') {
    steps {
        sh "mvn validate"
    }
}

stage('build-com') {
    steps {
        sh "mvn compile"
    }
}

stage('build-test') {
    steps {
        sh "mvn test"
    }
}

stage('build-install') {
    steps {
        sh "mvn package"
    }
}

stage('build to images') {
    steps {
        script{
            sh 'docker build -t nandhita22cse126/mysimplewebapp .'
        }
    }
}

stage('push to hub') {
    steps {
        script{
```

```

        withDockerRegistry(credentialsId: 'Docker_cred', url: 'https://index.docker.io/v1/') {
            sh 'docker push nandhita22cse126/mysimplewebapp'
        }
    }
}

stage('Deploy App') {
    steps {
        withKubeConfig(caCertificate: '', clusterName: 'minikube', contextName: 'minikube',
credentialsId: 'mukubeconfig_011', namespace: '', restrictKubeConfigAccess: false, serverUrl:
'https://192.168.49.2:8443') {
            sh 'kubectl apply -f deployment.yml --validate=false'
        }
    }
}

stage('Test') {
    steps {
        withKubeConfig(caCertificate: '', clusterName: 'minikube', contextName: 'minikube',
credentialsId: 'mukubeconfig_011', namespace: '', restrictKubeConfigAccess: false, serverUrl:
'https://192.168.49.2:8443') {

            sh 'minikube service my-service --url | xargs curl'
        }
    }
}

```