

```

sandhiya@ITP-CC16-03: ~/.ku X + v
sandhiya@ITP-CC16-03:~$ sudo systemctl start ssh
sandhiya@ITP-CC16-03:~$ sudo systemctl enable ssh
Synchronizing state of ssh.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable ssh
Created symlink /etc/systemd/system/ssh.service → /usr/lib/systemd/system/ssh.service.
Created symlink /etc/systemd/system/multi-user.target.wants/ssh.service → /usr/lib/systemd/system/ssh.service.
sandhiya@ITP-CC16-03:~$ systemctl status ssh
● ssh.service - OpenBSD Secure Shell server
   Loaded: loaded (/usr/lib/systemd/system/ssh.service; enabled; preset: enabled)
   Active: active (running) since Fri 2025-03-21 08:28:17 UTC; 23s ago
 TriggeredBy: ● ssh.socket
       Docs: man:sshd(8)
              man:sshd_config(5)
    Main PID: 7854 (sshd)
       Tasks: 1 (limit: 4572)
      Memory: 1.2M ( )
     CGroup: /system.slice/ssh.service
             └─7854 "sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups"

Mar 21 08:28:17 ITP-CC16-03 systemd[1]: Starting ssh.service - OpenBSD Secure Shell server...
Mar 21 08:28:17 ITP-CC16-03 sshd[7854]: Server listening on :: port 22.
Mar 21 08:28:17 ITP-CC16-03 systemd[1]: Started ssh.service - OpenBSD Secure Shell server.
sandhiya@ITP-CC16-03:~$ sudo systemctl restart ssh
sandhiya@ITP-CC16-03:~$ sudo systemctl restart ssh.service
sandhiya@ITP-CC16-03:~$ sudo systemctl restart sshd.service
sandhiya@ITP-CC16-03:~$ ls
minikube-linux-amd64
sandhiya@ITP-CC16-03:~$ sudo systemctl daemon-reload
sandhiya@ITP-CC16-03:~$ sudo systemctl status ssh
● ssh.service - OpenBSD Secure Shell server
   Loaded: loaded (/usr/lib/systemd/system/ssh.service; enabled; preset: enabled)
   Active: active (running) since Fri 2025-03-21 08:29:41 UTC; 5min ago
 TriggeredBy: ● ssh.socket
       Docs: man:sshd(8)
              man:sshd_config(5)
    Main PID: 8289 (sshd)
       Tasks: 1 (limit: 4572)
      Memory: 1.2M ( )
     CGroup: /system.slice/ssh.service
             └─8289 "sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups"

Mar 21 08:29:41 ITP-CC16-03 systemd[1]: Starting ssh.service - OpenBSD Secure Shell server...

```

sandhiya@ITP-CC16-03: ~/.kube

```
sandhiya@ITP-CC16-03:~/.kube$ kubectl get node
```

Command 'kubectl' not found, but can be installed with:

```
sudo snap install kubectl
```

```
sandhiya@ITP-CC16-03:~/.kube$ sudo snap install kubectl
```

error: This revision of snap "kubectl" was published using classic confinement and thus may perform arbitrary system changes outside of the security sandbox that snaps are usually confined to, which may put your system at risk.

If you understand and want to proceed repeat the command including --classic.

```
sandhiya@ITP-CC16-03:~/.kube$ chmod +x kubectl
```

```
mkdir -p ~/.local/bin
```

```
mv ./kubectl ~/.local/bin/kubectl
```

chmod: cannot access 'kubectl': No such file or directory

mv: cannot stat './kubectl': No such file or directory

```
sandhiya@ITP-CC16-03:~/.kube$ cd ..
```

```
sandhiya@ITP-CC16-03:~$ chmod +x kubectl
```

```
mkdir -p ~/.local/bin
```

```
mv ./kubectl ~/.local/bin/kubectl
```

chmod: cannot access 'kubectl': No such file or directory

mv: cannot stat './kubectl': No such file or directory

```
sandhiya@ITP-CC16-03:~$ curl -LO https://dl.k8s.io/release/v1.32.0/bin/linux/amd64/kubectl
```

```
sudo install -o root -g root -m 0755 kubectl /usr/local/bin/kubectl
```

% Total	% Received	% Xferd	Average Speed	Time	Time	Time	Current
			Dload Upload	Total	Spent	Left	Speed
100	138	100	138	0	0	216	0 --:--:-- --:--:-- --:--:-- 216
100	54.6M	100	54.6M	0	0	1414k	0 0:00:39 0:00:39 --:--:-- 1374k

```
sandhiya@ITP-CC16-03:~$ chmod +x kubectl
```

```
mkdir -p ~/.local/bin
```

```
mv ./kubectl ~/.local/bin/kubectl
```

```
sandhiya@ITP-CC16-03:~$ kubectl get node
```

NAME	STATUS	ROLES	AGE	VERSION
minikube	Ready	control-plane	40m	v1.32.0

```
sandhiya@ITP-CC16-03:~$ cd ~/.kube
```

```
sandhiya@ITP-CC16-03:~/.kube$ kubectl get node
```

NAME	STATUS	ROLES	AGE	VERSION
minikube	Ready	control-plane	44m	v1.32.0

```
sandhiya@ITP-CC16-03:~/.kube$ |
```

```
sandhiya@ITP-CC16-03: ~/ku X + v
Building dependency tree... Done
Reading state information... Done
56 packages can be upgraded. Run 'apt list --upgradable' to see them.
sandhiya@ITP-CC16-03:~$ sudo apt install -y docker.io
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  bridge-utils containerd dns-root-data dnsmasq-base iptables libip4tc2 libip6tc2 libnetfilter-contrack3
  libnftnl1 libnftables1 libnftnl11 nftables pigz runc ubuntu-fan
Suggested packages:
  ifupdown aufs-tools btrfs-progs cgroupfs-mount | cgroup-lite debootstrap docker-buildx docker-compose-v2 docker-doc
  rinse zfs-fuse | zfsutils firewallld
The following NEW packages will be installed:
  bridge-utils containerd dns-root-data dnsmasq-base docker.io iptables libip4tc2 libip6tc2 libnetfilter-contrack3
  libnftnl1 libnftables1 libnftnl11 nftables pigz runc ubuntu-fan
0 upgraded, 16 newly installed, 0 to remove and 56 not upgraded.
Need to get 79.6 MB of archives.
After this operation, 306 MB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu noble/universe amd64 pigz amd64 2.8-1 [65.6 kB]
Get:2 http://archive.ubuntu.com/ubuntu noble/main amd64 libip4tc2 amd64 1.8.10-3ubuntu2 [23.3 kB]
Get:3 http://archive.ubuntu.com/ubuntu noble/main amd64 libip6tc2 amd64 1.8.10-3ubuntu2 [23.7 kB]
Get:4 http://archive.ubuntu.com/ubuntu noble/main amd64 libnftnl1 amd64 1.0.2-2build1 [14.8 kB]
Get:5 http://archive.ubuntu.com/ubuntu noble/main amd64 libnetfilter-contrack3 amd64 1.0.9-6build1 [45.2 kB]
Get:6 http://archive.ubuntu.com/ubuntu noble/main amd64 libnftnl11 amd64 1.2.6-2build1 [66.0 kB]
Get:7 http://archive.ubuntu.com/ubuntu noble/main amd64 iptables amd64 1.8.10-3ubuntu2 [381 kB]
Get:8 http://archive.ubuntu.com/ubuntu noble/main amd64 libnftables1 amd64 1.0.9-1build1 [358 kB]
Get:9 http://archive.ubuntu.com/ubuntu noble/main amd64 nftables amd64 1.0.9-1build1 [69.8 kB]
Get:10 http://archive.ubuntu.com/ubuntu noble/main amd64 bridge-utils amd64 1.7.1-1ubuntu2 [33.9 kB]
Get:11 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 runc amd64 1.1.12-0ubuntu3.1 [8599 kB]
Get:12 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 containerd amd64 1.7.24-0ubuntu1~24.04.1 [37.0 MB]
Get:13 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 dns-root-data all 2024071801-ubuntu0.24.04.1 [5918 B]
Get:14 http://archive.ubuntu.com/ubuntu noble/main amd64 dnsmasq-base amd64 2.90-2build2 [375 kB]
Get:15 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 docker.io amd64 26.1.3-0ubuntu1~24.04.1 [32.4 MB]
Get:16 http://archive.ubuntu.com/ubuntu noble/universe amd64 ubuntu-fan all 0.12.16 [35.2 kB]
Fetched 79.6 MB in 21s (3764 kB/s)
Preconfiguring packages ...
Selecting previously unselected package pigz.
(Reading database ... 40768 files and directories currently installed.)
Preparing to unpack .../00-pigz_2.8-1_amd64.deb ...
Unpacking pigz (2.8-1) ...
Selecting previously unselected package libip4tc2:amd64.
```

```

sandhiya@ITP-CC16-03: ~/ku X + v
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for dbus (1.14.10-4ubuntu4.1) ...
Processing triggers for libc-bin (2.39-0ubuntu8.4) ...
sandhiya@ITP-CC16-03:~$ sudo systemctl enable --now docker
sandhiya@ITP-CC16-03:~$ sudo usermod -aG docker $USER
sandhiya@ITP-CC16-03:~$ newgrp docker
sandhiya@ITP-CC16-03:~$ docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
e6590344b1a5: Pull complete
Digest: sha256:7e1a4e2d11e2ac7a8c3f768d4166c2defeb09d2a750b010412b6ea13de1efb19
Status: Downloaded newer image for hello-world:latest

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
 1. The Docker client contacted the Docker daemon.
 2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
    (amd64)
 3. The Docker daemon created a new container from that image which runs the
    executable that produces the output you are currently reading.
 4. The Docker daemon streamed that output to the Docker client, which sent it
    to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
$ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
https://hub.docker.com/

For more examples and ideas, visit:
https://docs.docker.com/get-started/

sandhiya@ITP-CC16-03:~$ minikube start --driver=docker
🐳 minikube v1.35.0 on Ubuntu 24.04 (amd64)
🔧 Using the docker driver based on user configuration
🔧 Using Docker driver with root privileges
🔥 Starting "minikube" primary control-plane node in "minikube" cluster
📶 Pulling base image v0.0.46 ...
📦 Downloading Kubernetes v1.32.0 preload ...
> preloaded-images-k8s-v18-v1...: 333.57 MiB / 333.57 MiB 100.00% 4.22 Mi

```

```

sandhiya@ITP-CC16-03: ~/ku X + v
Last modification reported: Sun, 12 Nov 2023 22:44:07 +0000
Release file created at: Thu, 25 Apr 2024 15:10:33 +0000
E: Failed to fetch http://archive.ubuntu.com/ubuntu/dists/noble-updates/main/cnf/Commands-amd64 403 Forbidden [IP: 91.189.91.83 80]
E: Some index files failed to download. They have been ignored, or old ones used instead.
sandhiya@ITP-CC16-03:~$ minikube start
minikube: command not found
sandhiya@ITP-CC16-03:~$ curl -LO https://storage.googleapis.com/minikube/releases/latest/minikube-linux-amd64
sudo install minikube-linux-amd64 /usr/local/bin/minikube
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left   Speed
100 119M 100 119M    0     0 4291k      0  0:00:28  0:00:28 --:--:-- 4698k
sandhiya@ITP-CC16-03:~$ minikube version
minikube version: v1.35.0
commit: dd5d320e41b5451cdf3c01891bc4e13d189586ed-dirty
sandhiya@ITP-CC16-03:~$ minikube start
🐳 minikube v1.35.0 on Ubuntu 24.04 (amd64)
🔧 Unable to pick a default driver. Here is what was considered, in preference order:
  ▪ docker: Not healthy: "docker version --format {{.Server.Os}}-{{.Server.Version}}:{{.Server.Platform.Name}}" exit status 1:
  ▪ docker: Suggestion: <https://minikube.sigs.k8s.io/docs/drivers/docker/>
🔧 Alternatively you could install one of these drivers:
  ▪ kvm2: Not installed: exec: "virsh": executable file not found in $PATH
  ▪ qemu2: Not installed: exec: "qemu-system-x86_64": executable file not found in $PATH
  ▪ podman: Not installed: exec: "podman": executable file not found in $PATH
  ▪ virtualbox: Not installed: unable to find VBoxManage in $PATH

❌ Exiting due to DRV_NOT_HEALTHY: Found driver(s) but none were healthy. See above for suggestions how to fix installed drivers.

sandhiya@ITP-CC16-03:~$ minikube status
🔧 Profile "minikube" not found. Run "minikube profile list" to view all profiles.
🔧 To start a cluster, run: "minikube start"
sandhiya@ITP-CC16-03:~$ sudo apt update
Hit:1 http://archive.ubuntu.com/ubuntu noble InRelease
Hit:2 http://security.ubuntu.com/ubuntu noble-security InRelease
Hit:3 http://archive.ubuntu.com/ubuntu noble-backports InRelease
Get:4 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:5 http://archive.ubuntu.com/ubuntu noble/universe amd64 Packages [15.0 MB]
Get:6 http://archive.ubuntu.com/ubuntu noble/universe Translation-en [5982 kB]
Get:7 http://archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]
Get:7 http://archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]
Get:7 http://archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]
Get:7 http://archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]
Get:7 http://archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]

```



```
sandhiya@ITP-CC16-03: ~/ku X + v
Provisioning the new WSL instance Ubuntu
This might take a while...
Create a default Unix user account: Sandhiya
Invalid username. A valid username must start with a lowercase letter or underscore, and can contain lowercase letters, digits,
Create a default Unix user account: sandhiya
New password:
Retype new password:
passwd: password updated successfully
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

Welcome to Ubuntu 24.04.2 LTS (GNU/Linux 5.15.167.4-microsoft-standard-WSL2 x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Fri Mar 21 08:09:56 UTC 2025

System load:  0.07          Processes:            31
Usage of /:   0.1% of 1006.85GB  Users logged in:     0
Memory usage: 19%          IPv4 address for eth0: 192.168.224.138
Swap usage:   0%

This message is shown once a day. To disable it please create the
/home/sandhiya/.hushlogin file.
sandhiya@ITP-CC16-03:~$ sudo apt update
[sudo] password for sandhiya:
Hit:1 http://archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:3 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:4 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [671 kB]
Get:5 http://archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Ign:6 http://archive.ubuntu.com/ubuntu noble/universe amd64 Packages
Get:7 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [130 kB]
Get:8 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [8960 B]
Get:9 http://security.ubuntu.com/ubuntu noble-security/main amd64 c-n-f Metadata [6936 B]
Get:10 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [820 kB]
Get:11 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [177 kB]
Get:12 http://archive.ubuntu.com/ubuntu noble/universe Translation-en [5982 kB]
Get:13 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [51.9 kB]
```

[illegible]