

Steps:

-> changing user name:

- 1) add a user(temp):
 `sudo adduser temp`
- 2) give sudo privileges to temp
 `sudo usermod -aG sudo temp`
- 3) login to temp
- 4) change username of mainuser:
 `sudo usermod -l newname oldname`
- 5) logout
- 6) login to main user
- 7) check if the new username is updated in terminal by typing `whoami` command

-> docker installation steps:

- 1) search for docker installation
- 2) click only the link which has `docs.docker.*` (it is the official website)
- 3) follow the installation steps and commands given in the website

Add Docker's official GPG key:

```
sudo apt-get update
sudo apt-get install ca-certificates curl
sudo install -m 0755 -d /etc/apt/keyrings
sudo curl -fsSL https://download.docker.com/linux/ubuntu/gpg -o
/etc/apt/keyrings/docker.asc
sudo chmod a+r /etc/apt/keyrings/docker.asc
```

Add the repository to Apt sources:

```
echo \
"deb [arch=$(dpkg --print-architecture) signed-by=/etc/apt/keyrings/docker.asc]
https://download.docker.com/linux/ubuntu \
$(. /etc/os-release && echo "${UBUNTU_CODENAME:-$VERSION_CODENAME}")
stable" | \
sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
sudo apt-get update
```

```
Oct 15 15:09
trv24mc079_darshan@darshan-lenovo:~$ sudo apt-get install docker-ce docker-ce-cli containerd.io docker-buildx-plugin docker-compose-plugin
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following package was automatically installed and is no longer required:
  python3-netifaces
Use 'sudo apt autoremove' to remove it.
The following additional packages will be installed:
  docker-ce-rootless-extras libslirp0 pigz slirp4netns
Suggested packages:
  cgroupfs-mount | cgroup-lite docker-model-plugin
The following NEW packages will be installed:
  containerd.io docker-buildx-plugin docker-ce docker-ce-cli
  docker-ce-rootless-extras docker-compose-plugin libslirp0 pigz slirp4netns
0 upgraded, 9 newly installed, 0 to remove and 208 not upgraded.
Need to get 105 MB of archives.
After this operation, 436 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 https://download.docker.com/linux/ubuntu noble/stable amd64 containerd.io amd64 1.7.28-1-ubuntu.24.04-noble [31.9 MB]
Get:2 http://in.archive.ubuntu.com/ubuntu noble/universe amd64 pigz amd64 2.8-1 [65.6 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu noble/main amd64 libslirp0 amd64 4.7.0-1ubuntu3 [63.8 kB]
Get:4 http://in.archive.ubuntu.com/ubuntu noble/universe amd64 slirp4netns amd64 1.2.1-1build2 [34.9 kB]
17% [1 containerd.io 13.1 MB/31.9 MB 41%] 807 kB/s 1min 53s
```

```
Oct 15 15:11
trv24mc079_darshan@darshan-lenovo:~$
Selecting previously unselected package containerd.io.
(Reading database ... 294022 files and directories currently installed.)
Preparing to unpack .../0-containerd.io_1.7.28-1-ubuntu.24.04-noble_amd64.deb ...
Unpacking containerd.io (1.7.28-1-ubuntu.24.04-noble) ...
Selecting previously unselected package docker-ce-cli.
Preparing to unpack .../1-docker-ce-cli_5%3a28.5.1-1-ubuntu.24.04-noble_amd64.deb ...
Unpacking docker-ce-cli (5:28.5.1-1-ubuntu.24.04-noble) ...
Selecting previously unselected package docker-ce.
Preparing to unpack .../2-docker-ce_5%3a28.5.1-1-ubuntu.24.04-noble_amd64.deb ...
Unpacking docker-ce (5:28.5.1-1-ubuntu.24.04-noble) ...
Selecting previously unselected package pigz.
Preparing to unpack .../3-pigz_2.8-1_amd64.deb ...
Unpacking pigz (2.8-1) ...
Selecting previously unselected package docker-buildx-plugin.
Preparing to unpack .../4-docker-buildx-plugin_0.29.1-1-ubuntu.24.04-noble_amd64.deb ...
Unpacking docker-buildx-plugin (0.29.1-1-ubuntu.24.04-noble) ...
Selecting previously unselected package docker-ce-rootless-extras.
Preparing to unpack .../5-docker-ce-rootless-extras_5%3a28.5.1-1-ubuntu.24.04-noble_amd64.deb ...
Unpacking docker-ce-rootless-extras (5:28.5.1-1-ubuntu.24.04-noble) ...
Selecting previously unselected package docker-compose-plugin.
Preparing to unpack .../6-docker-compose-plugin_2.40.0-1-ubuntu.24.04-noble_amd64.deb ...
Unpacking docker-compose-plugin (2.40.0-1-ubuntu.24.04-noble) ...
Selecting previously unselected package libslirp0:amd64.
Preparing to unpack .../7-libslirp0_4.7.0-1ubuntu3_amd64.deb ...
Unpacking libslirp0:amd64 (4.7.0-1ubuntu3) ...
Selecting previously unselected package slirp4netns.
Preparing to unpack .../8-slirp4netns_1.2.1-1build2_amd64.deb ...
Unpacking slirp4netns (1.2.1-1build2) ...
Setting up docker-buildx-plugin (0.29.1-1-ubuntu.24.04-noble) ...
Setting up containerd.io (1.7.28-1-ubuntu.24.04-noble) ...
Created symlink /etc/systemd/system/multi-user.target.wants/containerd.service → /usr/lib/systemd/system/containerd.service.
Setting up docker-compose-plugin (2.40.0-1-ubuntu.24.04-noble) ...
Setting up docker-ce-cli (5:28.5.1-1-ubuntu.24.04-noble) ...
Setting up libslirp0:amd64 (4.7.0-1ubuntu3) ...
Setting up pigz (2.8-1) ...
Setting up docker-ce-rootless-extras (5:28.5.1-1-ubuntu.24.04-noble) ...
Setting up slirp4netns (1.2.1-1build2) ...
Setting up docker-ce (5:28.5.1-1-ubuntu.24.04-noble) ...
Created symlink /etc/systemd/system/multi-user.target.wants/docker.service → /usr/lib/systemd/system/docker.service.
Created symlink /etc/systemd/system/sockets.target.wants/docker.socket → /usr/lib/systemd/system/docker.socket.
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for libc-bin (2.39-0ubuntu8.5) ...
trv24mc079_darshan@darshan-lenovo:~$
```

```
Oct 15 15:14
1rv24mc079_darshan@darshan-lenovo:~$ sudo groupadd docker
groupadd: group 'docker' already exists
1rv24mc079_darshan@darshan-lenovo:~$ sudo usermod -aG docker $USER
1rv24mc079_darshan@darshan-lenovo:~$ newgrp docker
1rv24mc079_darshan@darshan-lenovo:~$ docker run hello-world
Unable to find image 'hello-world:latest' locally
^C1rv24mc079_darshan@darshan-lenovo:~$
```

4) if required provide password in the terminal during installation

```
Oct 15 15:09
1rv24mc079_darshan@darshan-lenovo:~$ sudo apt-get install docker-ce docker-ce-cli containerd.io docker-buildx-plugin docker-compose-plugin
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following package was automatically installed and is no longer required:
  python3-netifaces
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The following additional packages will be installed:
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  docker-ce-rootless-extras docker-compose-plugin libslirp0 pigz slirp4netns
0 upgraded, 9 newly installed, 0 to remove and 208 not upgraded.
Need to get 105 MB of archives.
After this operation, 436 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 https://download.docker.com/linux/ubuntu noble/stable amd64 containerd.io amd64 1.7.28-1-ubuntu.24.04-noble [31.9 MB]
Get:2 http://in.archive.ubuntu.com/ubuntu noble/universe amd64 pigz amd64 2.8-1 [65.6 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu noble/main amd64 libslirp0 amd64 4.7.0-1ubuntu3 [63.8 kB]
Get:4 http://in.archive.ubuntu.com/ubuntu noble/universe amd64 slirp4netns amd64 1.2.1-1build2 [34.9 kB]
17% [1 containerd.io 13.1 MB/31.9 MB 41%] 807 kB/s 1min 53s
```

5) also go to the post installation steps module in the website and follow the given steps

```
Oct 15 15:13
trv24mc079_darshan@darshan-lenovo: ~
$ sudo groupadd docker
groupadd: group 'docker' already exists
trv24mc079_darshan@darshan-lenovo: ~
$ sudo usermod -aG docker $USER
trv24mc079_darshan@darshan-lenovo: ~
$
```

6) finally add the docker into services (systemctl services)

7) start the docker service

8) check if the service is running(status):

Sudo systemctl status docker

```
Oct 15 15:11
trv24mc079_darshan@darshan-lenovo: ~
$ sudo systemctl status docker
Preparing to unpack .../7-libsirp0 4.7.0-1ubuntu3_amd64.deb ...
Unpacking libsirp0:amd64 (4.7.0-1ubuntu3) ...
Selecting previously unselected package slirp4netns.
Preparing to unpack .../8-slirp4netns 1.2.1-1build2_amd64.deb ...
Unpacking slirp4netns (1.2.1-1build2) ...
Setting up docker-buildx-plugin (0.29.1-1-ubuntu.24.04-noble) ...
Setting up containerd.io (1.7.28-1-ubuntu.24.04-noble) ...
Created symlink /etc/systemd/system/multi-user.target.wants/containerd.service → /usr/lib/systemd/system/containerd.service.
Setting up docker-compose-plugin (2.40.0-1-ubuntu.24.04-noble) ...
Setting up docker-ce-cli (5:28.5.1-1-ubuntu.24.04-noble) ...
Setting up libsirp0:amd64 (4.7.0-1ubuntu3) ...
Setting up pigz (2.8-1) ...
Setting up docker-ce-rootless-extras (5:28.5.1-1-ubuntu.24.04-noble) ...
Setting up slirp4netns (1.2.1-1build2) ...
Setting up docker-ce (5:28.5.1-1-ubuntu.24.04-noble) ...
Created symlink /etc/systemd/system/multi-user.target.wants/docker.service → /usr/lib/systemd/system/docker.service.
Created symlink /etc/systemd/system/sockets.target.wants/docker.socket → /usr/lib/systemd/system/docker.socket.
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for libc-bin (2.39-0ubuntu8.5) ...
trv24mc079_darshan@darshan-lenovo: ~
$ sudo systemctl status docker
● docker.service - Docker Application Container Engine
   Loaded: loaded (/usr/lib/systemd/system/docker.service; enabled; preset: enabled)
   Active: active (running) since Wed 2025-10-15 15:11:20 IST; 16s ago
     TriggeredBy: ● docker.socket
    Docs: https://docs.docker.com
   Main PID: 17645 (dockerd)
     Tasks: 14
    Memory: 21.9M (peak: 23.3M)
       CPU: 239ms
    CGroup: /system.slice/docker.service
           └─17645 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock

Oct 15 15:11:19 darshan-Lenovo dockerd[17645]: time="2025-10-15T15:11:19.894679247+05:30" level=info msg="CDI directory does not exist, skipping; failed to monitor for
Oct 15 15:11:19 darshan-Lenovo dockerd[17645]: time="2025-10-15T15:11:19.921455996+05:30" level=info msg="Creating a containerd client" address=/run/containerd/contai
Oct 15 15:11:19 darshan-Lenovo dockerd[17645]: time="2025-10-15T15:11:19.948023905+05:30" level=info msg="Loading containers: start."
Oct 15 15:11:20 darshan-Lenovo dockerd[17645]: time="2025-10-15T15:11:20.182593118+05:30" level=info msg="Loading containers: done."
Oct 15 15:11:20 darshan-Lenovo dockerd[17645]: time="2025-10-15T15:11:20.190641498+05:30" level=info msg="Docker daemon" commit=f8215cc containerd-snapshotter=false s
Oct 15 15:11:20 darshan-Lenovo dockerd[17645]: time="2025-10-15T15:11:20.190709894+05:30" level=info msg="Initializing buildkit"
Oct 15 15:11:20 darshan-Lenovo dockerd[17645]: time="2025-10-15T15:11:20.203111161+05:30" level=info msg="Completed buildkit initialization"
Oct 15 15:11:20 darshan-Lenovo dockerd[17645]: time="2025-10-15T15:11:20.206473158+05:30" level=info msg="Daemon has completed initialization"
Oct 15 15:11:20 darshan-Lenovo dockerd[17645]: time="2025-10-15T15:11:20.206554073+05:30" level=info msg="API listen on /run/docker.sock"
Oct 15 15:11:20 darshan-Lenovo systemd[1]: Started docker.service - Docker Application Container Engine.
lines 1-22/22 (END)
```

9) this finishes the installation of docker