Lab 1 – changing username and docker engine istallation
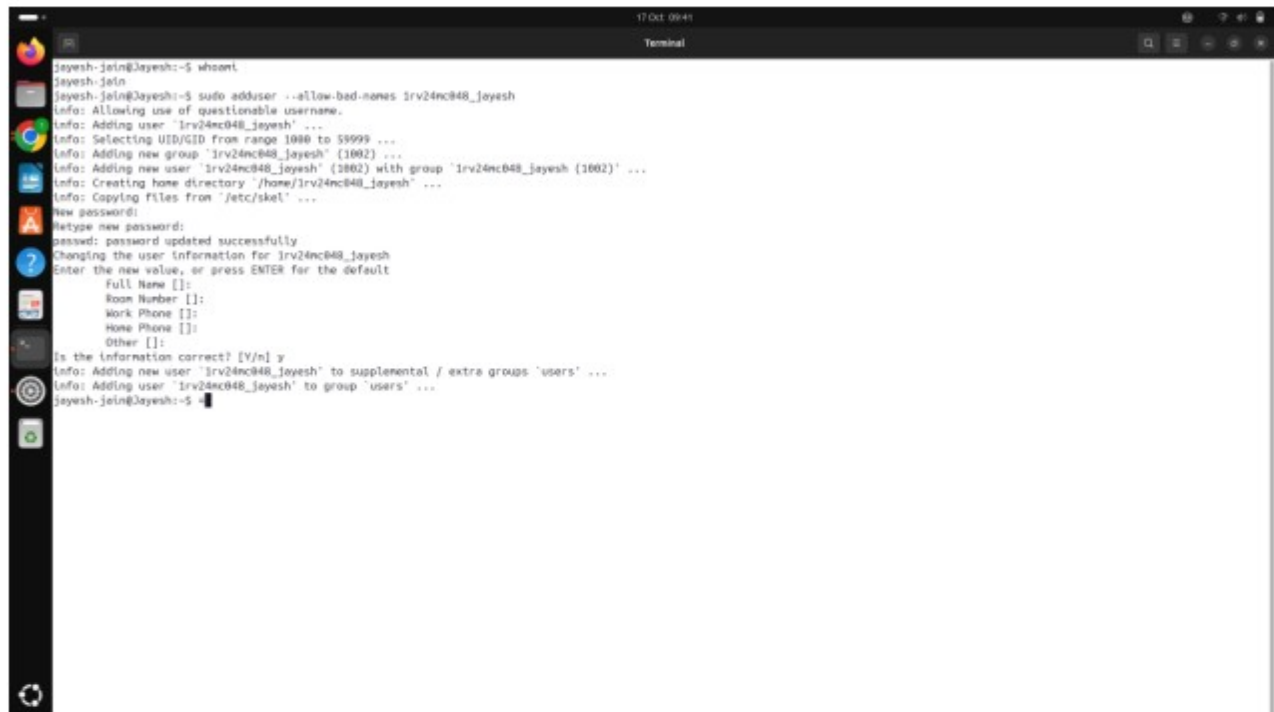
Add a tempuser
#sudo adduser tmpusr
Add user to sudo group
#sudo usermod -aG sudo username

check whether user added to groups
#groups username

Logout from the current user then login as a tmpusr
open terminal
sudo usermod -l new_username old_username

Logout and login as same user
Check whoami command to get username

Docker installation steps

Setup apt repository
Before you install Docker Engine for the first time on a new host machine, you need to set up the Docker apt repository. Afterward, you can install and update Docker from the repository.

```
# 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 apt-get update
```

Only necessary for a new system which did not have docker previously

Install the Docker packages.
sudo apt-get install docker-ce docker-ce-cli containerd.io docker-buildx-plugin docker-compose-plugin

To check docker installed or not
sudo systemctl status docker
or
docker –version

```
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 (2.39-0ubuntu8.6) ...
1rv24mc048_Jayesh@Jayesh:~$ 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 Fri 2025-10-17 10:27:14 IST; 55s ago
TriggeredBy: ● docker.socket
       Docs: https://docs.docker.com
   Main PID: 8745 (dockerd)
      Tasks: 10
     Memory: 58.1M (peak: 59.0M)
        CPU: 1.951s
     CGroup: /system.slice/docker.service
             └─8745 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock

Oct 17 10:27:11 Jayesh dockerd[8745]: time="2025-10-17T10:27:11.499776645+05:30" level=info msg="detected 127.0.0.53 nameserver, assuming systemd-resolved, so using resolv.conf: /run/
Oct 17 10:27:11 Jayesh dockerd[8745]: time="2025-10-17T10:27:11.773463856+05:30" level=info msg="Creating a containerd client" address=/run/containerd/containerd.sock timeout=1m0s
Oct 17 10:27:12 Jayesh dockerd[8745]: time="2025-10-17T10:27:12.008578199+05:30" level=info msg="Loading containers: start."
Oct 17 10:27:13 Jayesh dockerd[8745]: time="2025-10-17T10:27:13.826638591+05:30" level=info msg="Loading containers: done."
Oct 17 10:27:14 Jayesh dockerd[8745]: time="2025-10-17T10:27:14.008972939+05:30" level=info msg="Docker daemon" commit=f8215cc containerd-snapshotter=false storage-driver=overlay2 ver
Oct 17 10:27:14 Jayesh dockerd[8745]: time="2025-10-17T10:27:14.001503128+05:30" level=info msg="Initializing buildkit"
Oct 17 10:27:14 Jayesh dockerd[8745]: time="2025-10-17T10:27:14.168263315+05:30" level=info msg="Completed buildkit initialization"
Oct 17 10:27:14 Jayesh dockerd[8745]: time="2025-10-17T10:27:14.199493586+05:30" level=info msg="Daemon has completed initialization"
Oct 17 10:27:14 Jayesh dockerd[8745]: time="2025-10-17T10:27:14.199742580+05:30" level=info msg="API listen on /run/docker.sock"
Oct 17 10:27:14 Jayesh systemd[1]: Started docker.service - Docker Application Container Engine.
lines 1-22/22 (END)
```