DevOps lab session

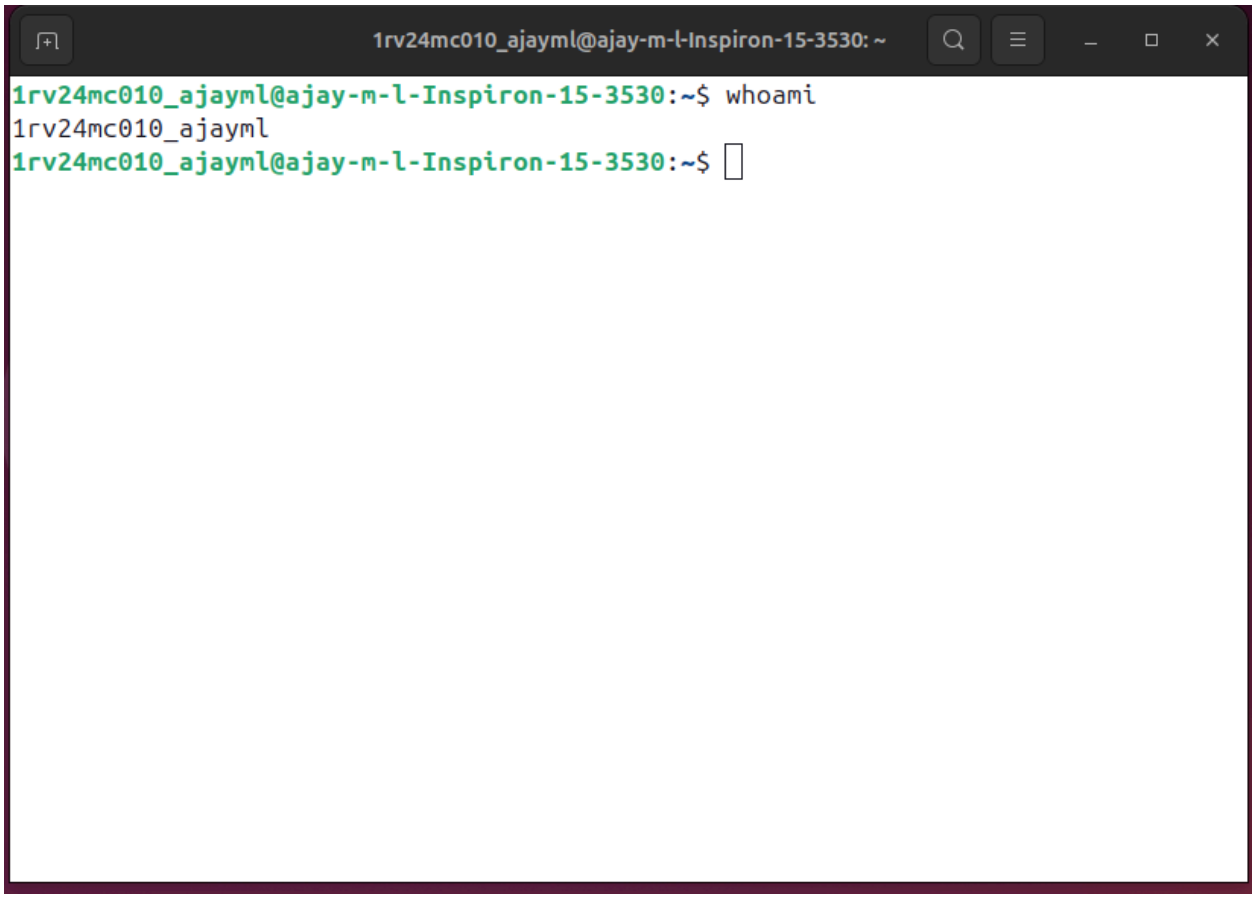
1.username

I created the tempadmin user and login as a user under this username and run the commands

Sudo usermod -l 1rv24mc010_ajayml ajay-m-l : this will change the login name

sudo usermod -d /home/1rv24mc010_ajayml -m 1rv24mc010_ajayml: renaming the home directory

Then i verified the username by whoami command



2.Docker installation

Step 1:

Update the package list and install the dependencies by

sudo apt-get update

sudo apt-get install ca-certificates curl gnupg lsb-release -y

```
Setting up curl (8.5.0-2ubuntu10.6) ...
Processing triggers for man-db (2.12.0-4build2) ...
1rv24mc010_ajayml@ajay-m-l-Inspiron-15-3530:~$ sudo mkdir -p /etc/apt/keyrings
curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -o /etc/apt/keyrings/docker.gpg
1rv24mc010_ajayml@ajay-m-l-Inspiron-15-3530:~$ echo \
  "deb [arch=$(dpkg --print-architecture) signed-by=/etc/apt/keyrings/docker.gpg] \
  https://download.docker.com/linux/ubuntu \
  $(lsb_release -cs) stable" | \
  sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
1rv24mc010_ajayml@ajay-m-l-Inspiron-15-3530:~$ sudo apt-get update
sudo apt-get install docker-ce docker-ce-cli containerd.io docker-buildx-plugin docker-compose-plugin -y
Get:1 https://download.docker.com/linux/ubuntu noble InRelease [48.5 kB]
Hit:2 http://in.archive.ubuntu.com/ubuntu noble InRelease
Hit:3 http://security.ubuntu.com/ubuntu noble-security InRelease
Get:4 https://download.docker.com/linux/ubuntu noble/stable amd64 Packages [33.0 kB]
Get:5 http://in.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:6 http://in.archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:7 http://in.archive.ubuntu.com/ubuntu noble-updates/main amd64 Components [175 kB]
Get:8 http://in.archive.ubuntu.com/ubuntu noble-updates/main amd64 c-n-f Metadata [15.3 kB]
Get:9 http://in.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Packages [2,090 kB]
Get:10 http://in.archive.ubuntu.com/ubuntu noble-updates/restricted Translation-en [470 kB]
Get:11 http://in.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Components [212 B]
Get:12 http://in.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [378 kB]
Get:13 http://in.archive.ubuntu.com/ubuntu noble-updates/universe amd64 c-n-f Metadata [31.2 kB]
Get:14 http://in.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [940 B]
Get:15 http://in.archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [7,144 B]
Get:16 http://in.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [216 B]
Get:17 http://in.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [11.0 kB]
Get:18 http://in.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
Fetched 3,512 kB in 9s (406 kB/s)
Reading package lists... Done
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  libgl1-amber-dri libglapi-mesa libllvm17t64
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  docker-ce-rootless-extras git git-man liberror-perl libslirp0 pigz
  slirp4netns
Suggested packages:
  cgroupfs-mount | cgroup-lite docker-model-plugin git-daemon-run
  | git-daemon-sysvinit git-doc git-email git-gui gitk gitweb git-cvs
  git-mediawiki git-svn
The following NEW packages will be installed:
  containerd.io docker-buildx-plugin docker-ce docker-ce-cli
```

Step 2:

Updated the package list again to fetch Docker's latest packages.
Installed Docker components using:

sudo apt-get install docker-ce docker-ce-cli containerd.io
docker-buildx-plugin docker-compose-plugin

```
  sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
1rv24mc010_ajayml@ajay-m-l-Inspiron-15-3530:~$ sudo apt-get update
sudo apt-get install docker-ce docker-ce-cli containerd.io docker-buildx-plugin docker-compose-plugin -y
Get:1 https://download.docker.com/linux/ubuntu noble InRelease [48.5 kB]
Hit:2 http://in.archive.ubuntu.com/ubuntu noble InRelease
Hit:3 http://security.ubuntu.com/ubuntu noble-security InRelease
Get:4 https://download.docker.com/linux/ubuntu noble/stable amd64 Packages [33.0 kB]
Get:5 http://in.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:6 http://in.archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:7 http://in.archive.ubuntu.com/ubuntu noble-updates/main amd64 Components [175 kB]
Get:8 http://in.archive.ubuntu.com/ubuntu noble-updates/main amd64 c-n-f Metadata [15.3 kB]
Get:9 http://in.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Packages [2,090 kB]
Get:10 http://in.archive.ubuntu.com/ubuntu noble-updates/restricted Translation-en [470 kB]
Get:11 http://in.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Components [212 B]
Get:12 http://in.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [378 kB]
Get:13 http://in.archive.ubuntu.com/ubuntu noble-updates/universe amd64 c-n-f Metadata [31.2 kB]
Get:14 http://in.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [940 B]
Get:15 http://in.archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [7,144 B]
Get:16 http://in.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [216 B]
Get:17 http://in.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [11.0 kB]
Get:18 http://in.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
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  slirp4netns
Suggested packages:
  cgroupfs-mount | cgroup-lite docker-model-plugin git-daemon-run
  | git-daemon-sysvinit git-doc git-email git-gui gitk gitweb git-cvs
  git-mediawiki git-svn
The following NEW packages will be installed:
  containerd.io docker-buildx-plugin docker-ce docker-ce-cli
  docker-ce-rootless-extras docker-compose-plugin git git-man liberror-perl
  libslirp0 pigz slirp4netns
0 upgraded, 12 newly installed, 0 to remove and 272 not upgraded.
Need to get 110 MB of archives.
After this operation, 461 MB of additional disk space will be used.
Get:1 http://in.archive.ubuntu.com/ubuntu noble/universe amd64 pigz amd64 2.8-1 [65.6 kB]
Get:2 https://download.docker.com/linux/ubuntu noble/stable amd64 containerd.io amd64 1.7.28-1~ubuntu.24.04~noble [31.9 MB]
Get:3 http://in.archive.ubuntu.com/ubuntu noble/main amd64 liberror-perl all 0.17029-2 [25.6 kB]
```

Step 3:

Verified the docker installation by :sudo docker run hello-world

```
1rv24mc010_ajayml@ajay-m-l-Inspiron-15-3530:~$ sudo docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
17eec7bbc9d7: Pull complete
Digest: sha256:6dc565aa630927052111f823c303948cf83670a3903ffa3849f1488ab517f891
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/

1rv24mc010_ajayml@ajay-m-l-Inspiron-15-3530:~$
```