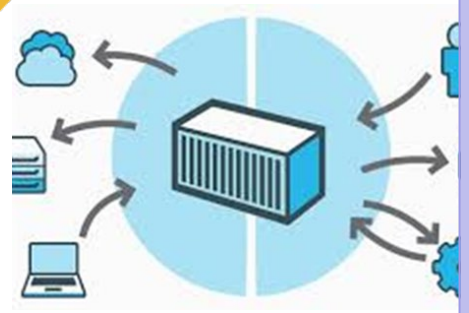


docker

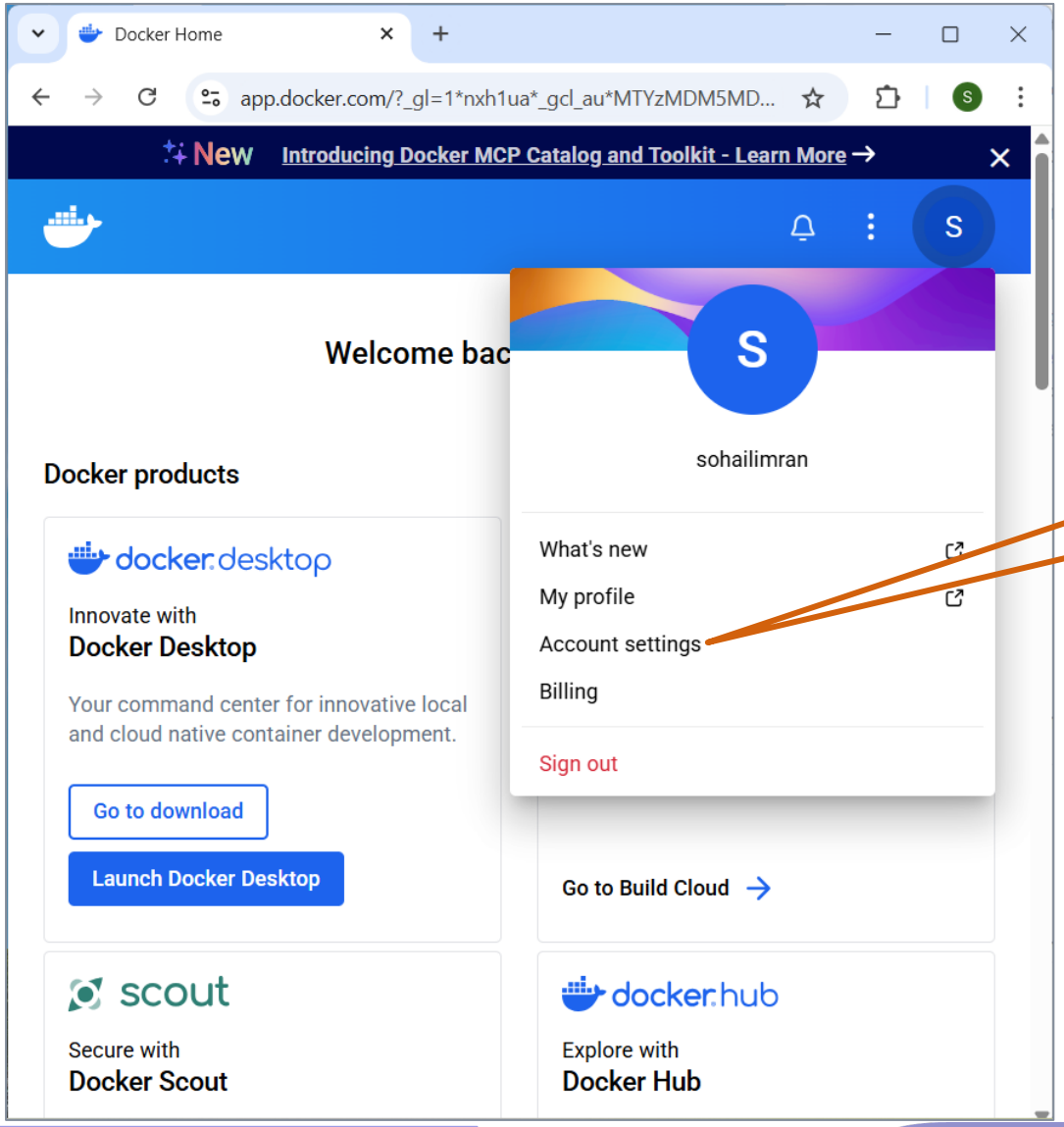
Dr. Sohail IMRAN سہیل عمران

Docker Installation

sohailimran2@yahoo.com

Ref: Web

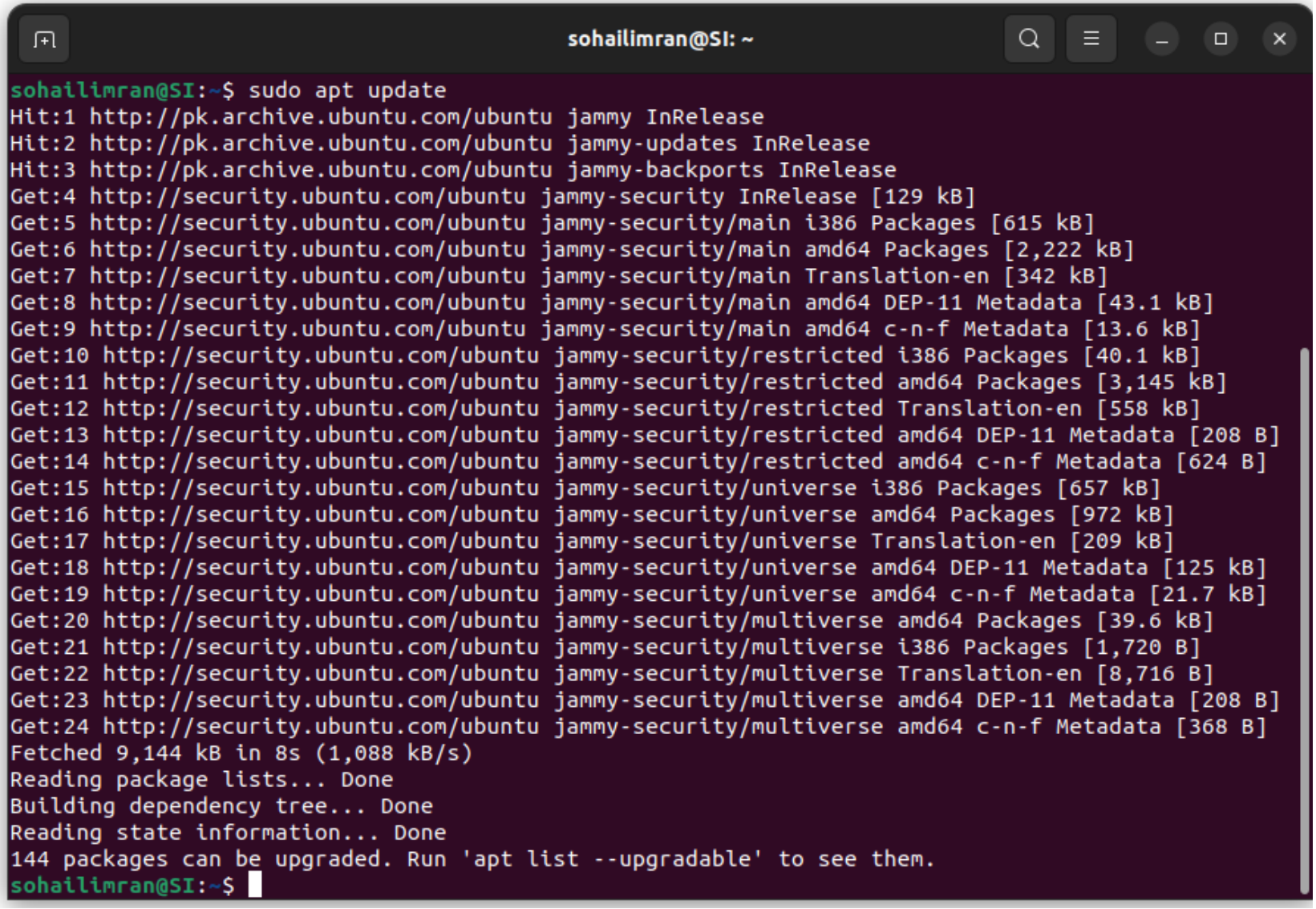
Docker Account



AVOID connecting with a ~~GOOGLE Account~~.

Create a **Docker Account** using **Username** and **Password**

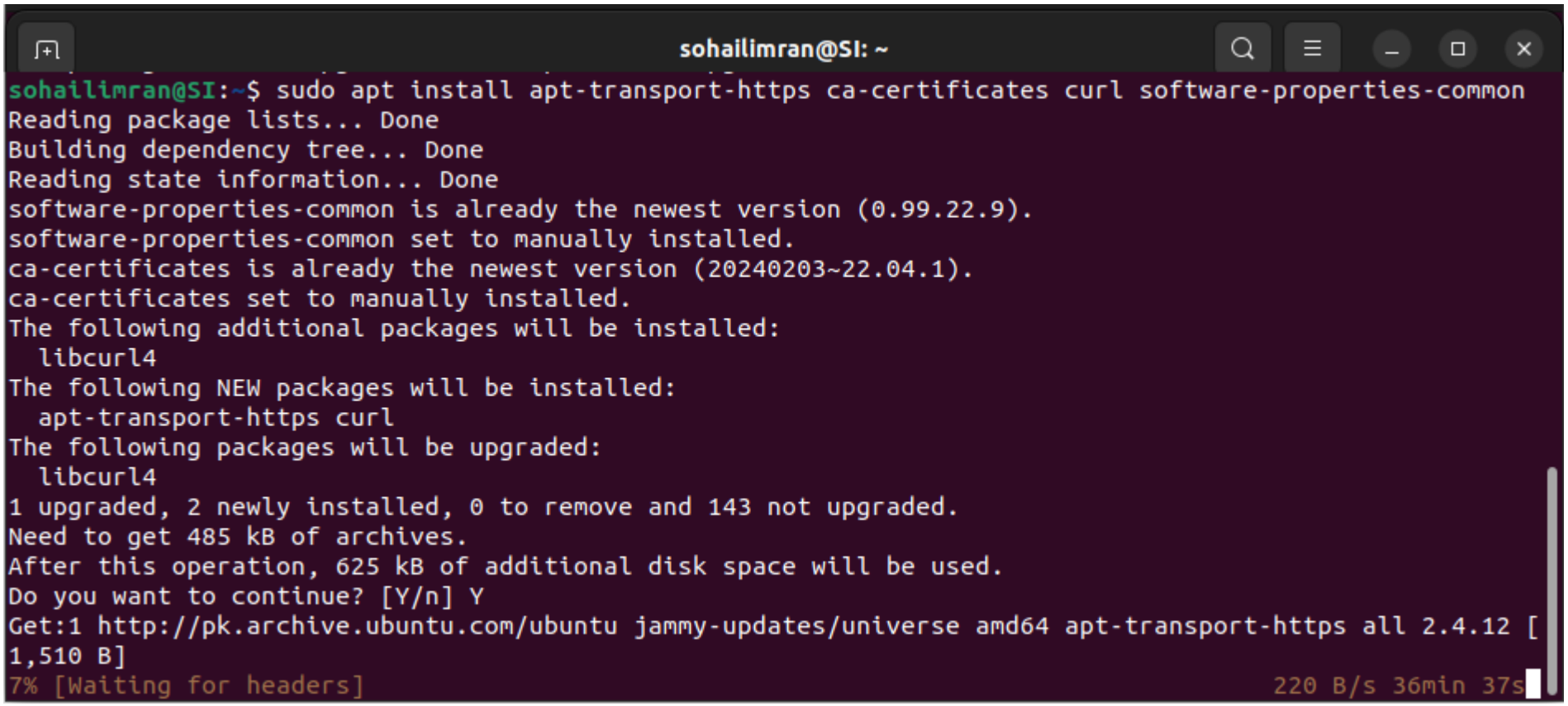
update


sohailimran@SI: ~
sohailimran@SI:~$ sudo apt update
Hit:1 http://pk.archive.ubuntu.com/ubuntu jammy InRelease
Hit:2 http://pk.archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:3 http://pk.archive.ubuntu.com/ubuntu jammy-backports InRelease
Get:4 http://security.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Get:5 http://security.ubuntu.com/ubuntu jammy-security/main i386 Packages [615 kB]
Get:6 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [2,222 kB]
Get:7 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [342 kB]
Get:8 http://security.ubuntu.com/ubuntu jammy-security/main amd64 DEP-11 Metadata [43.1 kB]
Get:9 http://security.ubuntu.com/ubuntu jammy-security/main amd64 c-n-f Metadata [13.6 kB]
Get:10 http://security.ubuntu.com/ubuntu jammy-security/restricted i386 Packages [40.1 kB]
Get:11 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [3,145 kB]
Get:12 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [558 kB]
Get:13 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 DEP-11 Metadata [208 B]
Get:14 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 c-n-f Metadata [624 B]
Get:15 http://security.ubuntu.com/ubuntu jammy-security/universe i386 Packages [657 kB]
Get:16 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [972 kB]
Get:17 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [209 kB]
Get:18 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 DEP-11 Metadata [125 kB]
Get:19 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [21.7 kB]
Get:20 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [39.6 kB]
Get:21 http://security.ubuntu.com/ubuntu jammy-security/multiverse i386 Packages [1,720 B]
Get:22 http://security.ubuntu.com/ubuntu jammy-security/multiverse Translation-en [8,716 B]
Get:23 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 DEP-11 Metadata [208 B]
Get:24 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 c-n-f Metadata [368 B]
Fetched 9,144 kB in 8s (1,088 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
144 packages can be upgraded. Run 'apt list --upgradable' to see them.
sohailimran@SI:~$

Ensure prerequisites

Run these commands one by one:

```
sudo apt install apt-transport-https
sudo apt install ca-certificates
sudo apt install curl
sudo apt install software-properties-common
```



Add Docker's official GPG (GNU Privacy Guard) key

Run the following 3 commands:

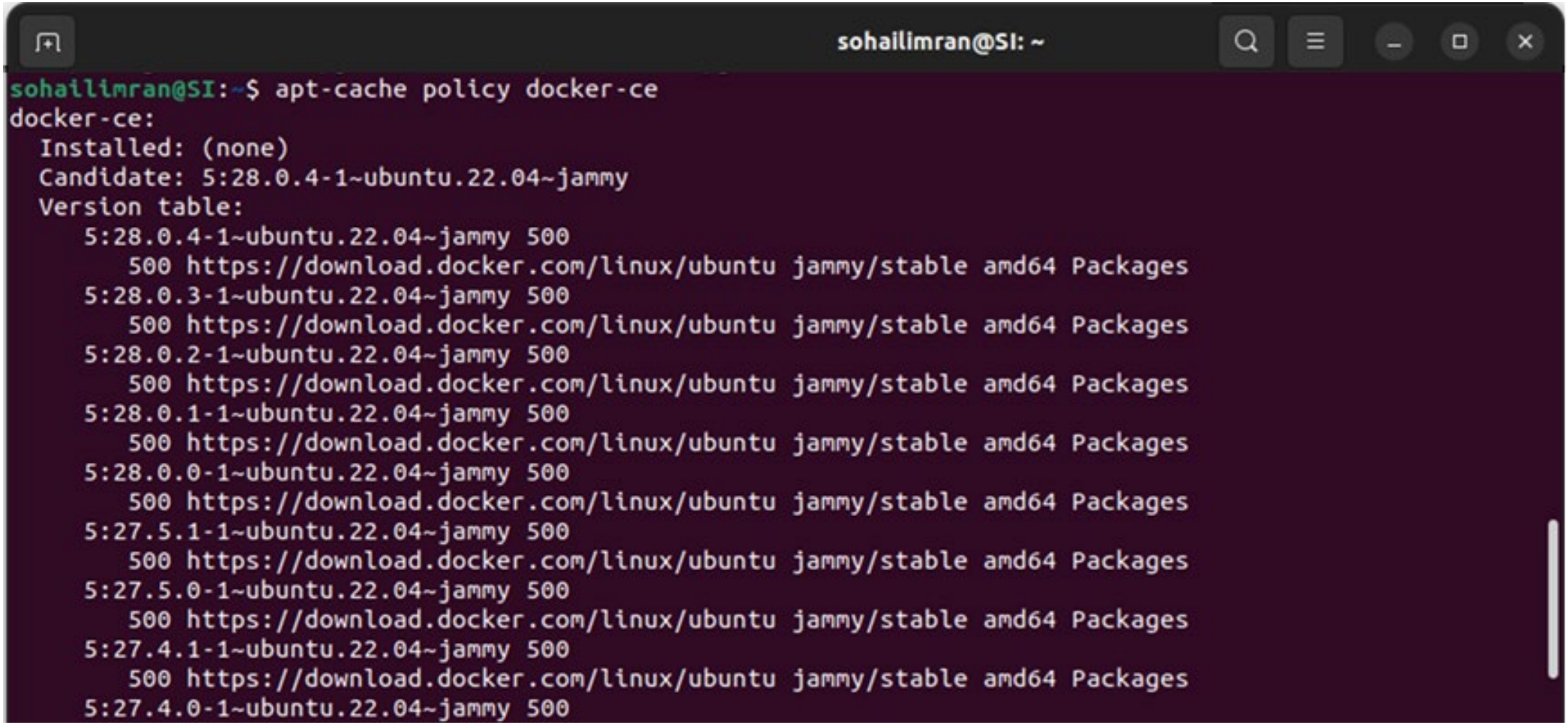
```
curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -o /usr/share/keyrings/docker-archive-keyring.gpg
```

```
echo "deb [arch=$(dpkg --print-architecture) signed-by=/usr/share/keyrings/docker-archive-keyring.gpg] \
https://download.docker.com/linux/ubuntu $(lsb_release -cs) stable" | \
sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
```

```
sudo apt update
```

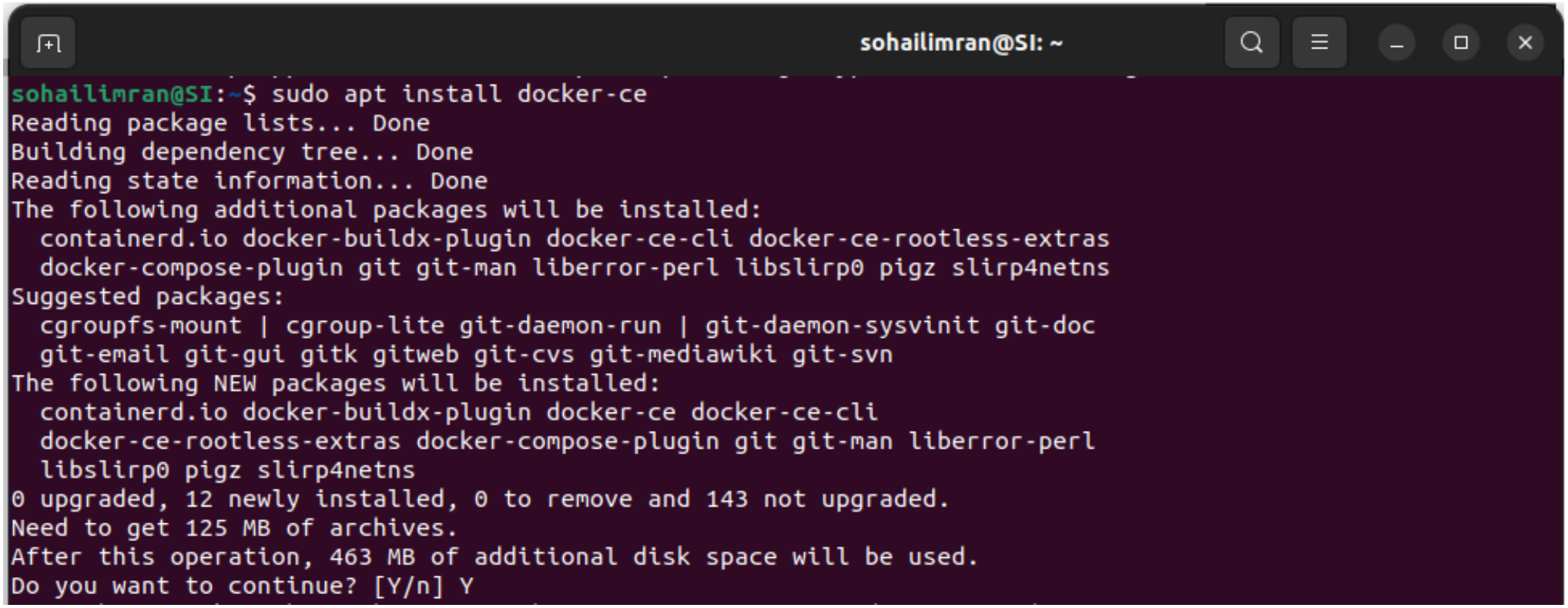
Ensure installation from the Docker repo

apt-cache policy docker-ce



install Docker

sudo apt install docker-ce



In case of Failure of the above command, run the Following command:

sudo snap install docker

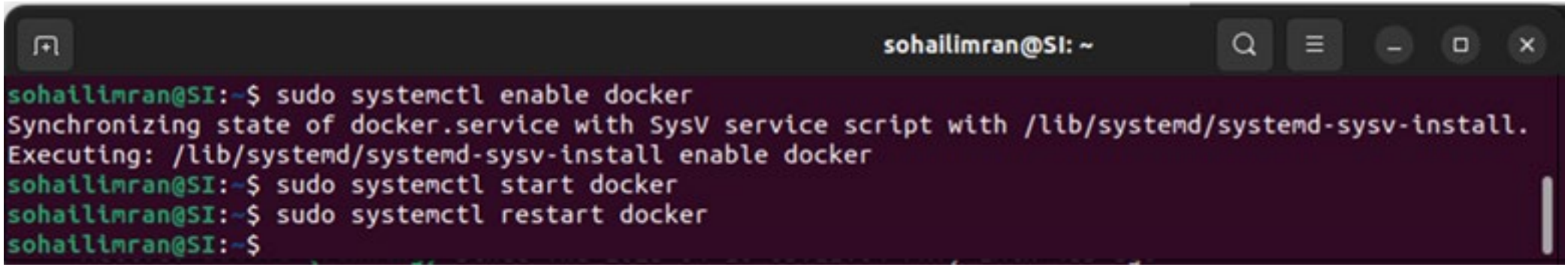
Verify

```
sohailimran@SI:~$ docker --version
Docker version 28.0.4, build b8034c0
```

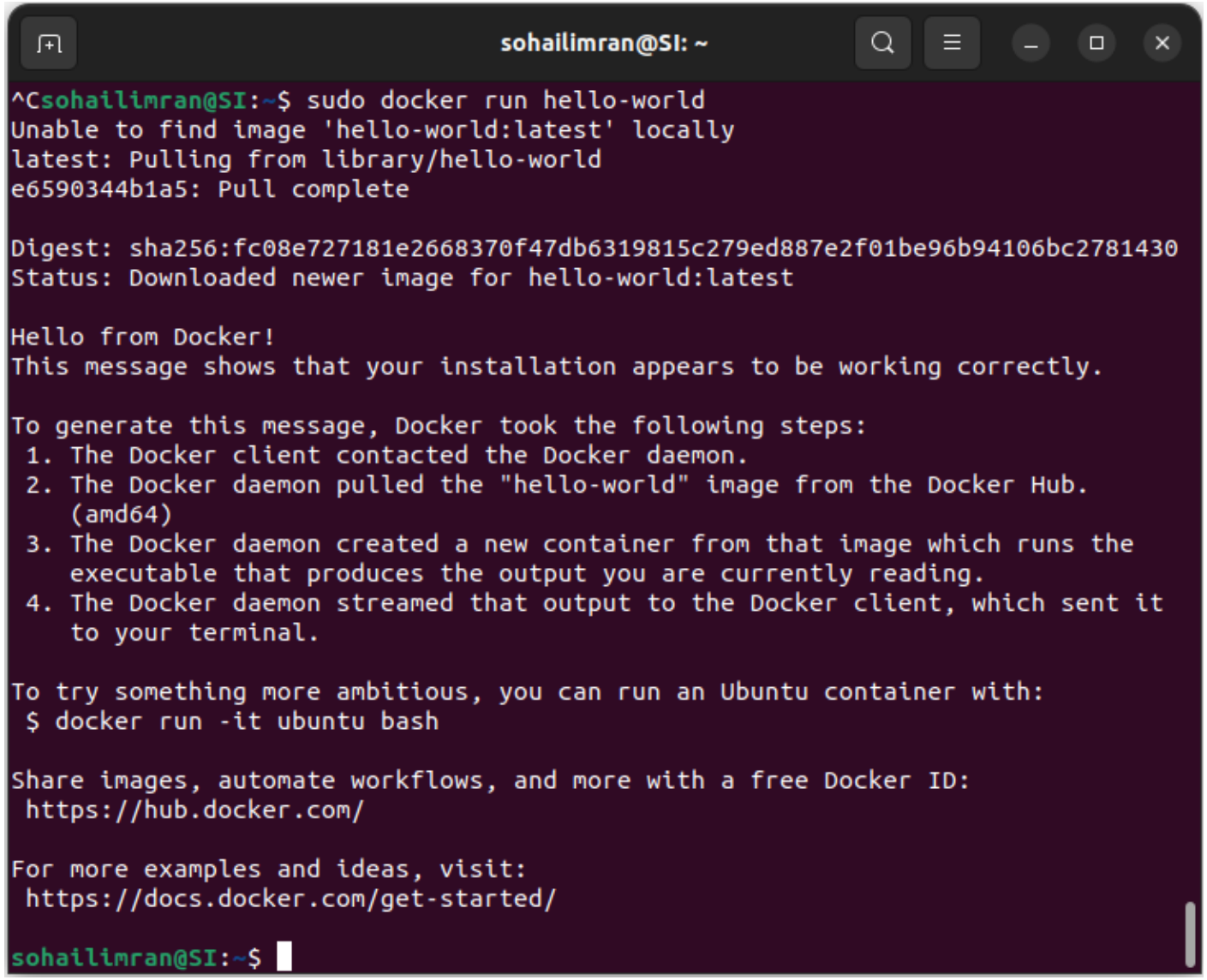
```
sohailimran@SI: ~
sohailimran@SI:~$ docker version
Client: Docker Engine - Community
 Version:           28.0.4
 API version:       1.48
 Go version:        go1.23.7
 Git commit:        b8034c0
 Built:             Tue Mar 25 15:07:11 2025
 OS/Arch:           linux/amd64
 Context:           default

Server: Docker Engine - Community
 Engine:
  Version:          28.0.4
  API version:      1.48 (minimum version 1.24)
  Go version:       go1.23.7
  Git commit:       6430e49
  Built:            Tue Mar 25 15:07:11 2025
  OS/Arch:          linux/amd64
  Experimental:     false
 containerd:
  Version:          1.7.27
  GitCommit:        05044ec0a9a75232cad458027ca83437aae3f4da
 runc:
  Version:          1.2.5
  GitCommit:        v1.2.5-0-g59923ef
 docker-init:
  Version:          0.19.0
  GitCommit:        de40ad0
sohailimran@SI:~$
```

Setup

```
sudo systemctl enable docker

sudo sytemctl start docker

sudo sytemctl restart docker
```



Testing


sohailimran@SI: ~
^Csohailimran@SI:~$ sudo docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
e6590344b1a5: Pull complete
Digest: sha256:fc08e727181e2668370f47db6319815c279ed887e2f01be96b94106bc2781430
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/
sohailimran@SI:~$