Module 7: Working with Docker

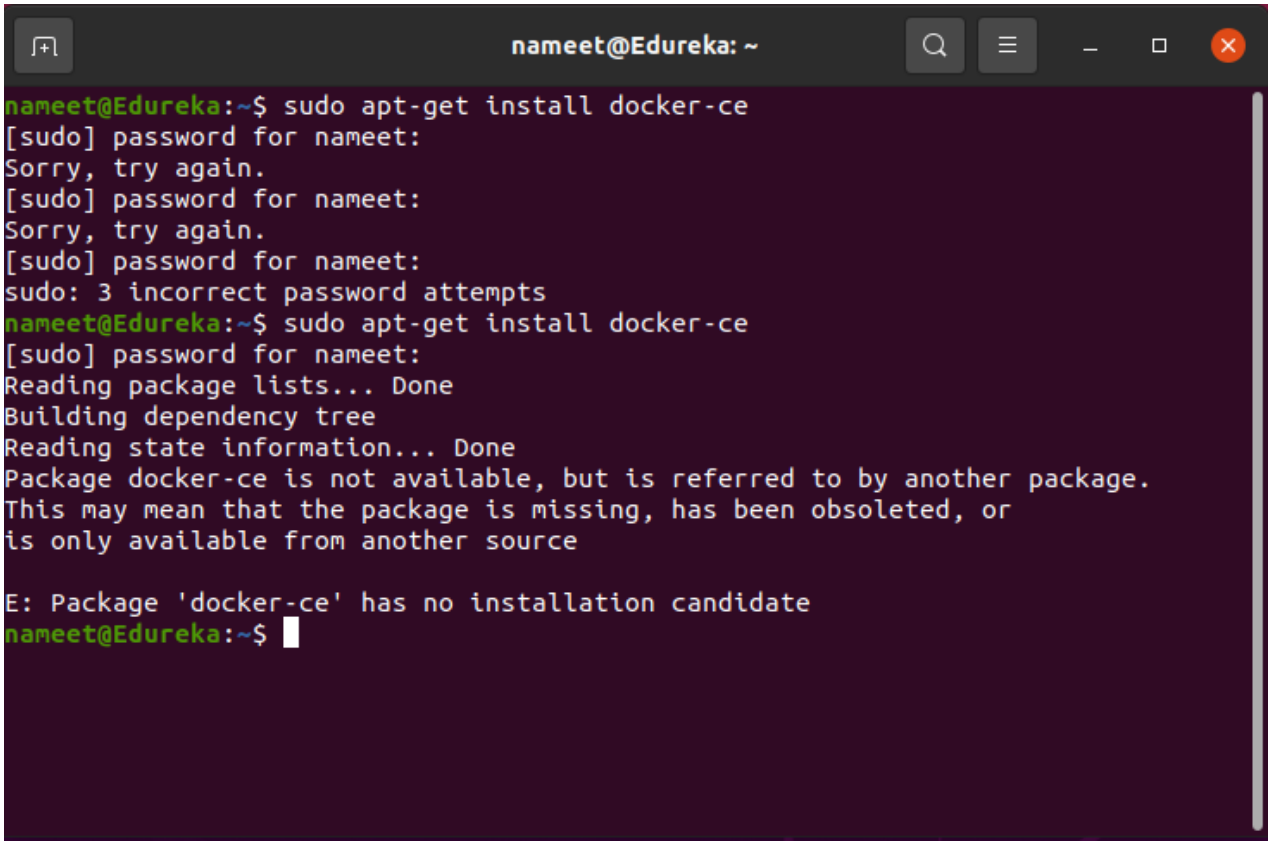
Demo 1

Demo 1: Installing Docker and Working with Docker

Step 1: Open Terminal in Linux

And type: sudo apt-get install docker-ce

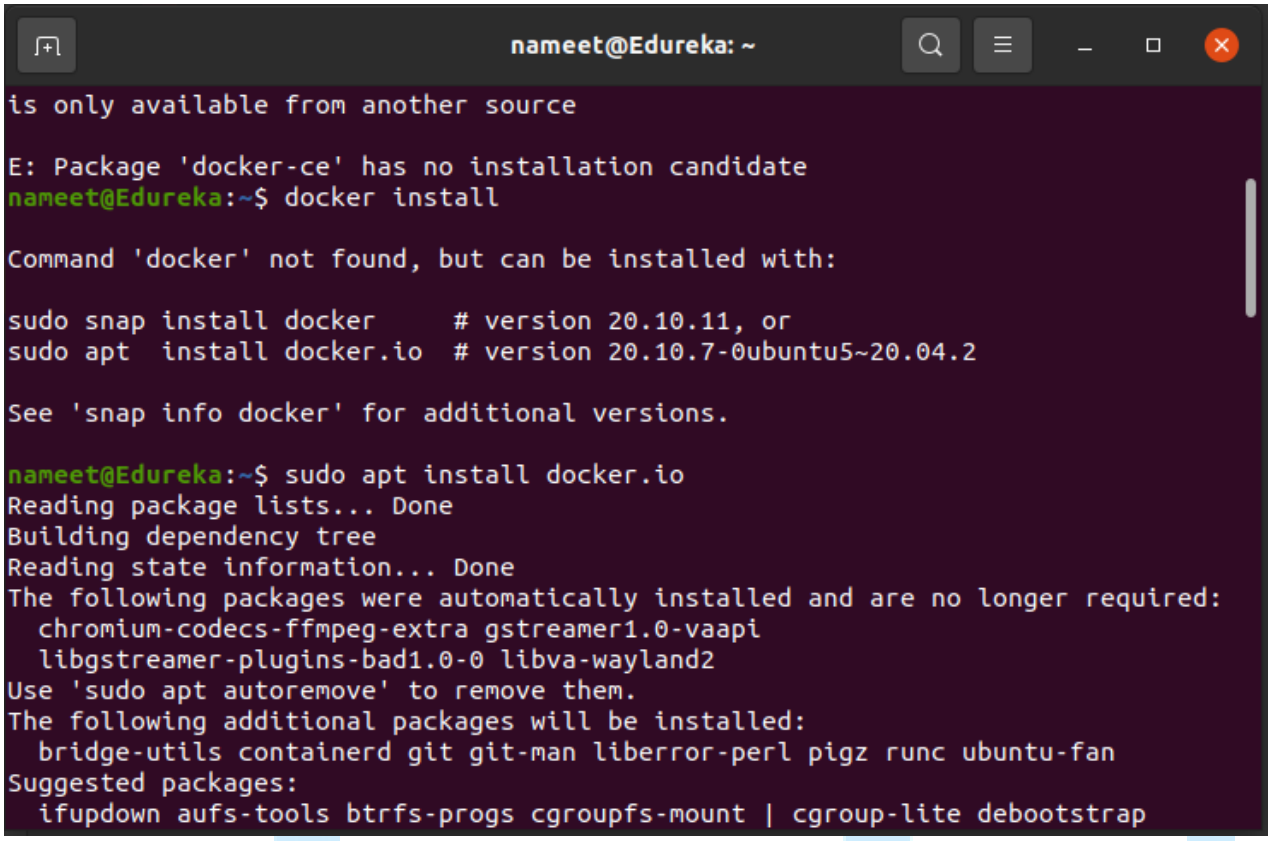
This cmd checks if you have a prior docker installation



If the above cmd doesn't work, then type the following:

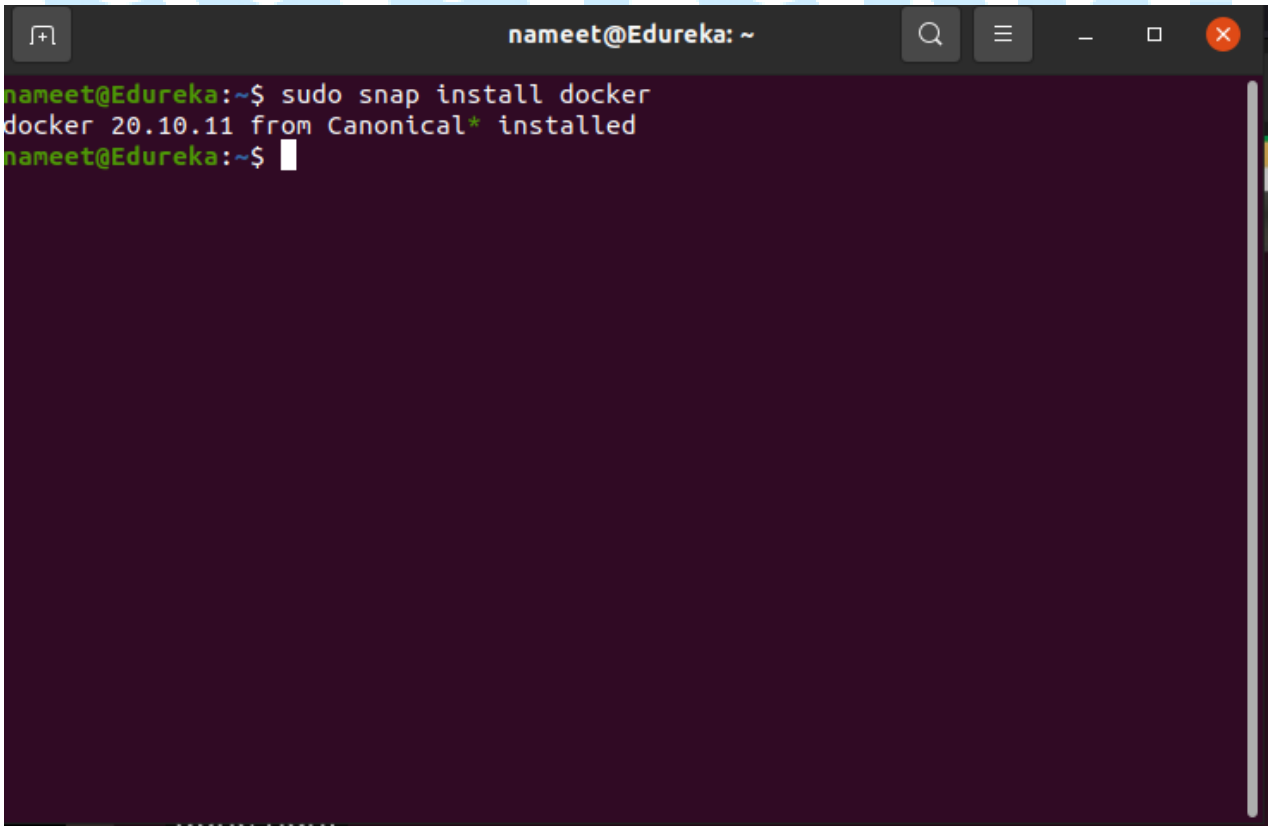
docker install

sudo apt install docker.io



The following cmd checks whether all the dependencies are installed or not

Sudo snap install docker

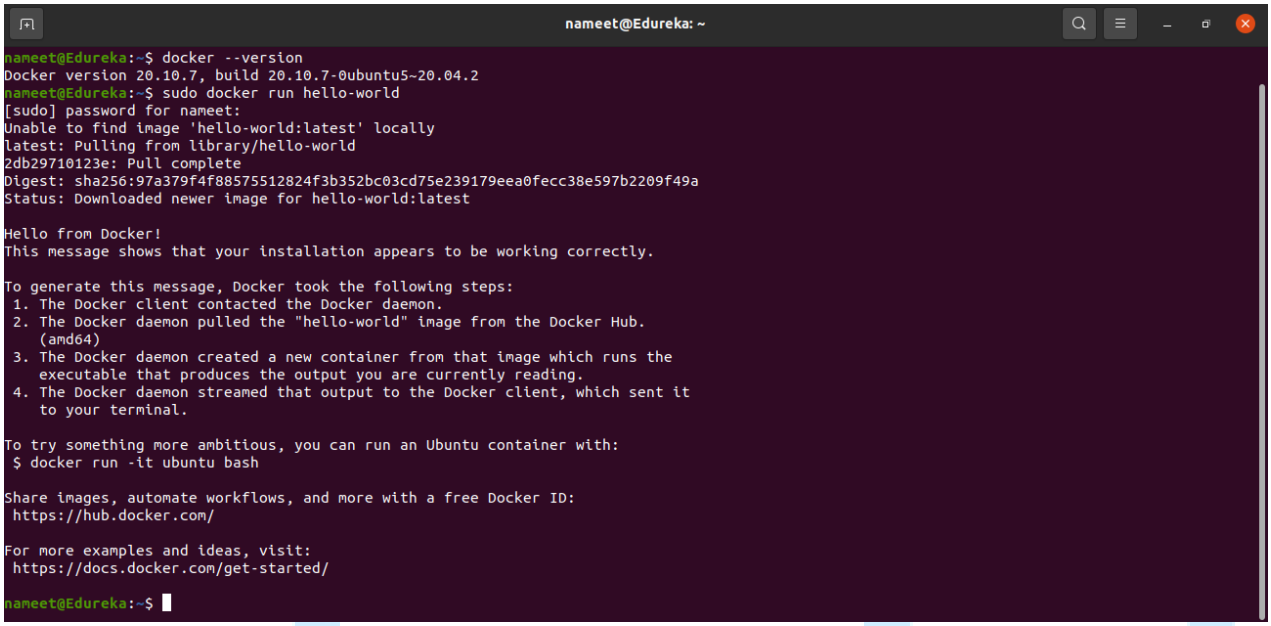


Type the cmd to check version

Docker –version

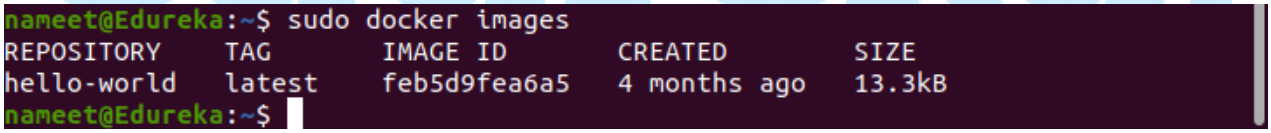
And run a image from pulled from docker hub

sudo docker run hello-world



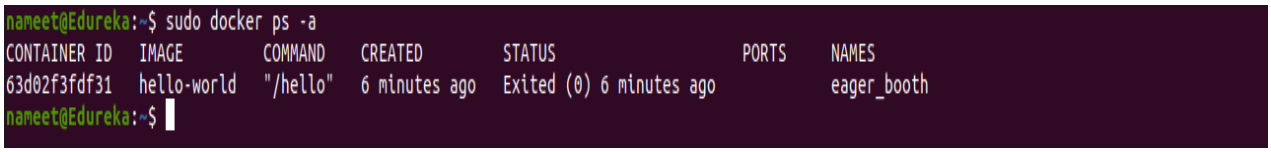
To check the images in your system

sudo docker images



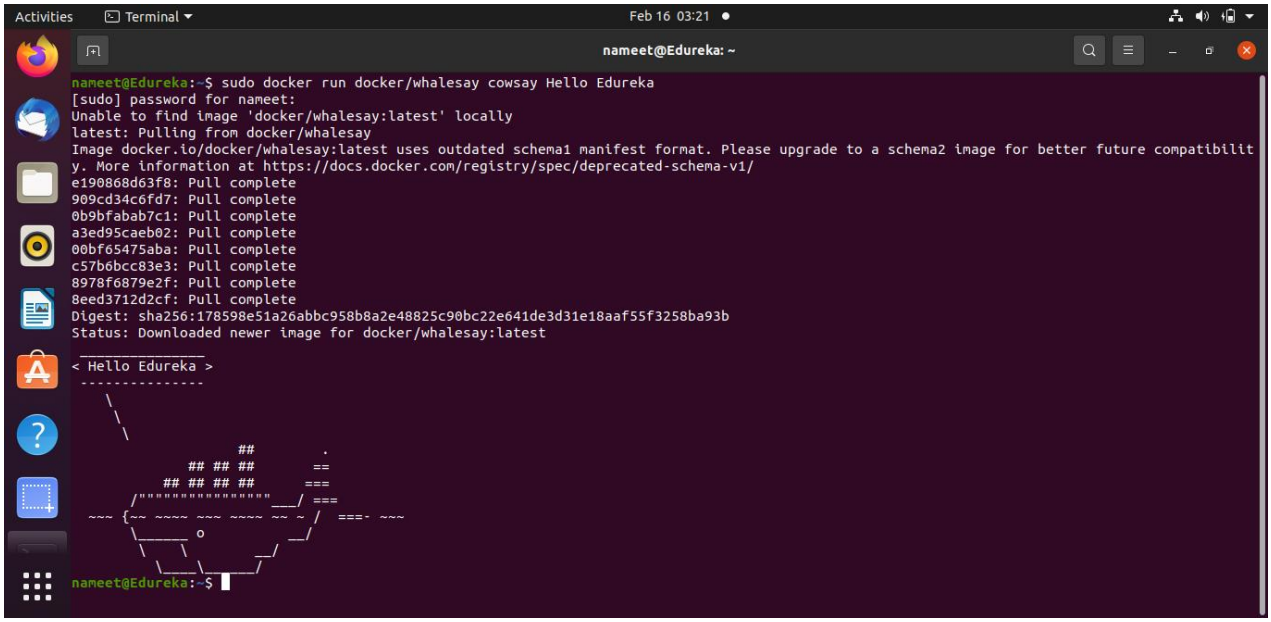
To check or display all containers pulled so far

sudo docker ps -a



To display only running container

To run a docker image



Running java-app

Open Your terminal in the folder where Hello.java file is present or make a directory

Hello.java:

```
public class Hello
{
	public static void main(String args[])
	{
		System.out.println("Hello World");
	}
}
```

Dockerfile:

```
FROM openjdk:8
COPY . /var/www/java
WORKDIR /var/www/java
RUN javac Hello.java
CMD ["java", "Hello"]
```

Java-app is built into image

```
nameet@Edureka:~/Documents$ mkdir java-app
nameet@Edureka:~/Documents$ cd java-app
nameet@Edureka:~/Documents/java-app$ sudo docker build -t java-app .
[sudo] password for nameet:
```

Run the program:

```
nameet@Edureka:~/Documents/java-app$ sudo docker build -t java-app .
Sending build context to Docker daemon  3.072kB
Step 1/5 : FROM java:8
 ---> d23bdf5b1b1b
Step 2/5 : COPY . /var/www/java
 ---> 1a972c324c61
Step 3/5 : WORKDIR /var/www/java
 ---> Running in a1ed516b7acd
Removing intermediate container a1ed516b7acd
 ---> 80303972b0a6
Step 4/5 : RUN javac Hello.java
 ---> Running in e0a932774972
Removing intermediate container e0a932774972
 ---> b20c853734d7
Step 5/5 : CMD ["java", "Hello"]
 ---> Running in 8a7d1819eeed
Removing intermediate container 8a7d1819eeed
 ---> 1ea36f44944a
Successfully built 1ea36f44944a
Successfully tagged java-app:latest
nameet@Edureka:~/Documents/java-app$ sudo docker run java-app
Hello World
nameet@Edureka:~/Documents/java-app$
```