**Name: Vishnu sadasivan**

**Roll No: 52**

**Batch: MCA-B**

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**NETWORKING & SYSTEM ADMINISTRATION LAB**

**Experiment No.: 23**

**Aim**

Docker installation on ubuntu.

**Procedure**

1. Open the terminal on Ubuntu.

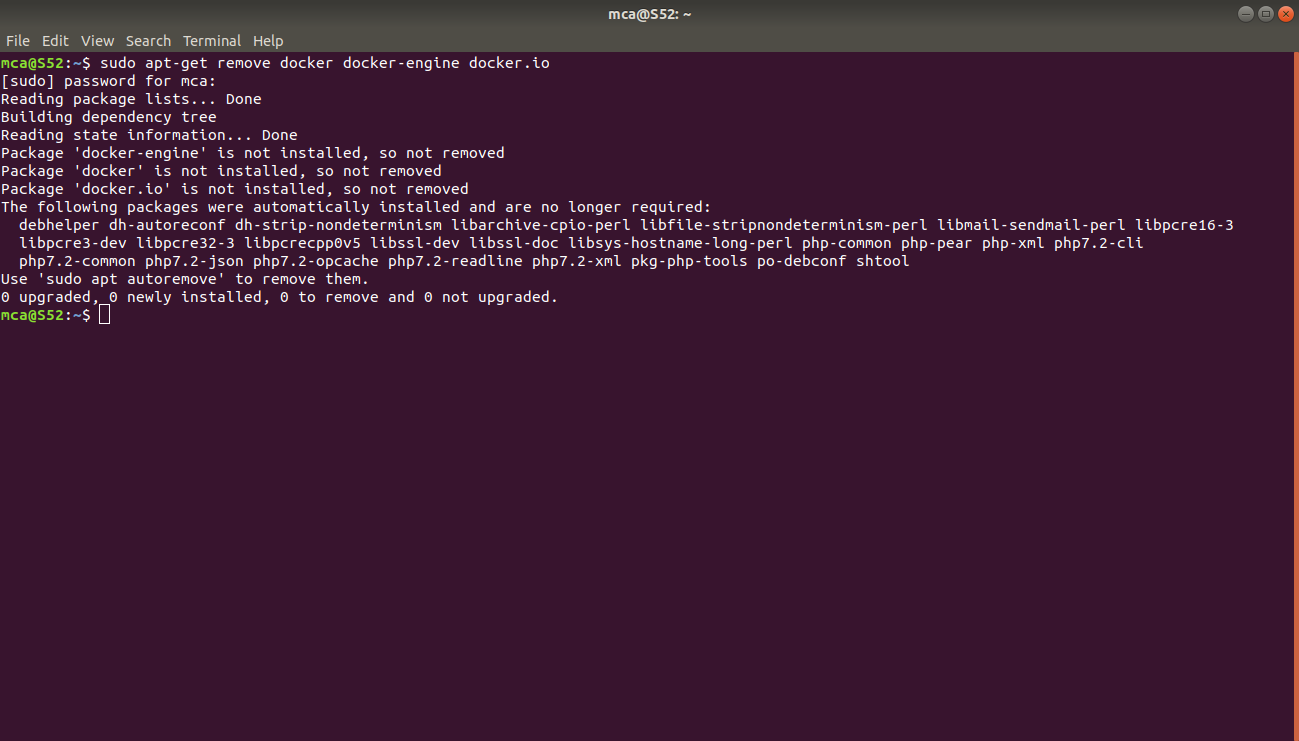
2. Remove any [Docker files](https://www.simplilearn.com/tutorials/docker-tutorial/what-is-dockerfile) that are running in the system, using the following command

**command:**

$ sudo apt-get remove docker docker-engine docker.io

After entering the above command, you will need to enter the password of the root and press enter.

**Output:**

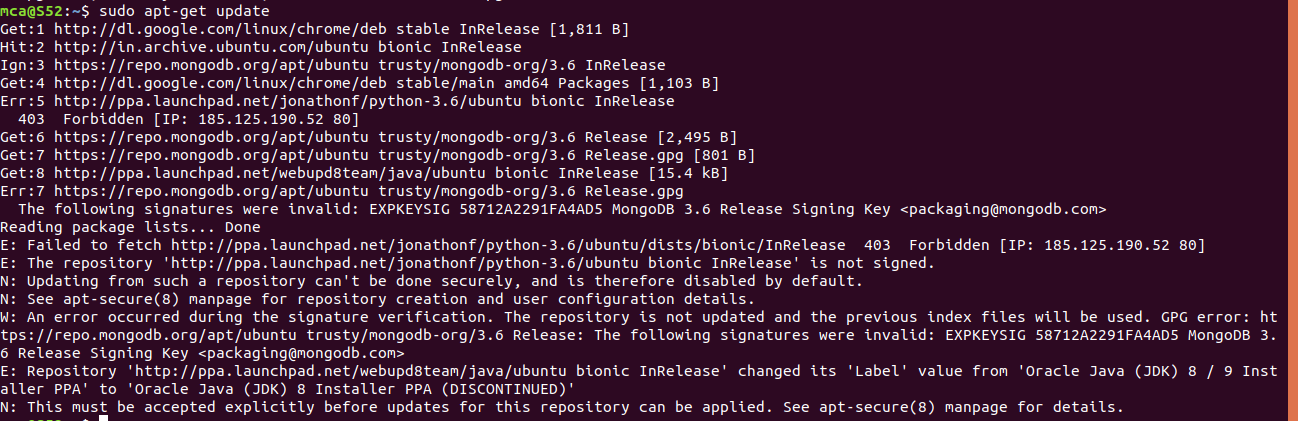
****

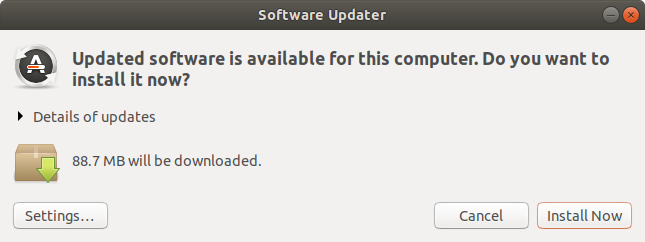
3. Check if the system is up-to-date using the following command:

**command:**

$ sudo apt-get update

**Output:**





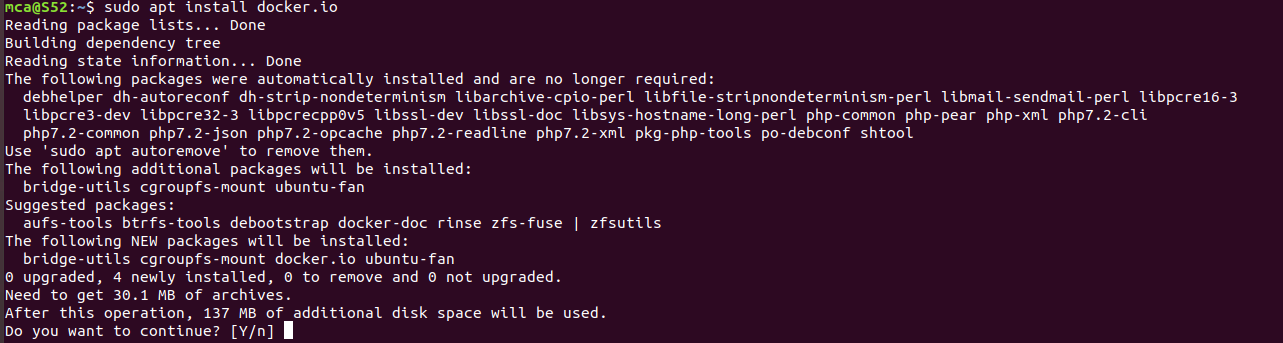
4. Install Docker using the following command:

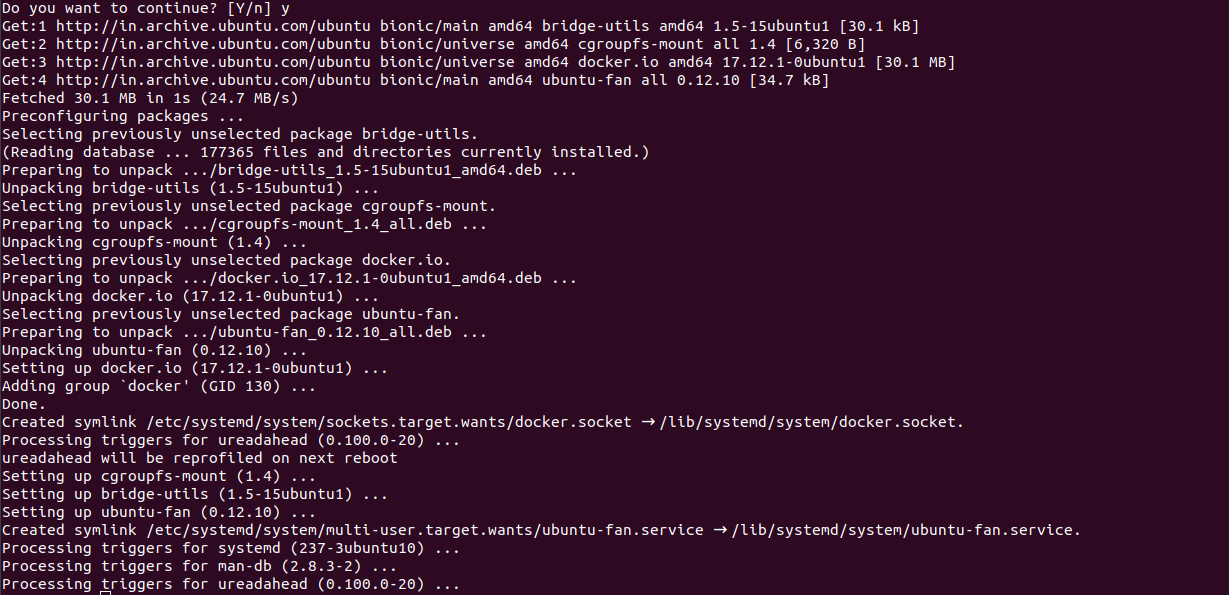
**command:**

$ sudo apt install docker.io

You’ll then get a prompt asking you to choose between y/n - choose y

**Output:**

****



5. Install all the dependency packages using the following command:

**command:**

$ sudo snap install docker

**Output:**

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6. Before testing Docker, check the version installed using the following command:

**command:**

$ docker –version

**Output:**

****

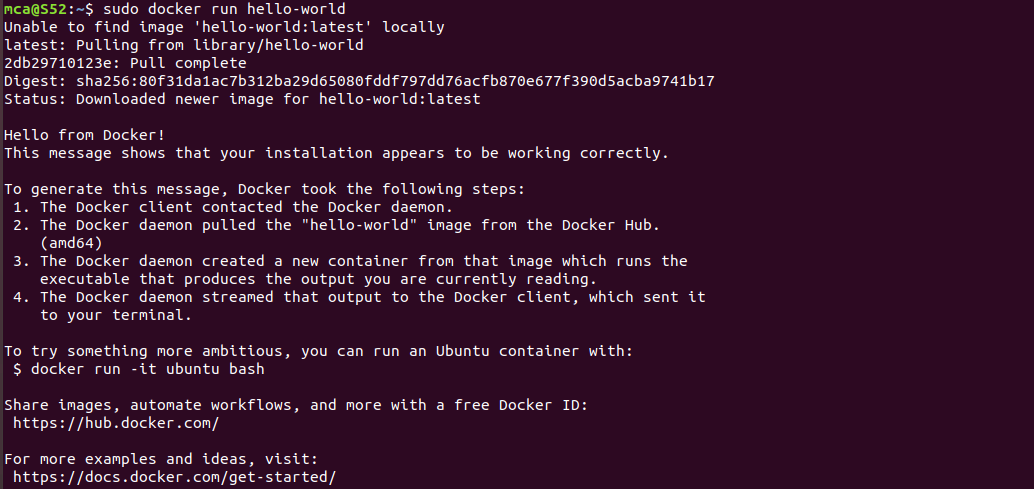
7. Pull an image from the Docker hub using the following command:

**command:**

$ sudo docker run hello-world

Here,hello-world is the docker image present on the Docker hub.

**Output:**

****

8. Check if the docker image has been pulled and is present in your system using the following command:

**command:**

$ sudo docker images

**Output:**

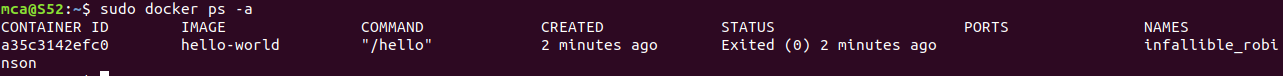


9. To display all the containers pulled, use the following command:

**command:**

$ sudo docker ps -a

**Output:**



10. To check for containers in a running state, use the following command:

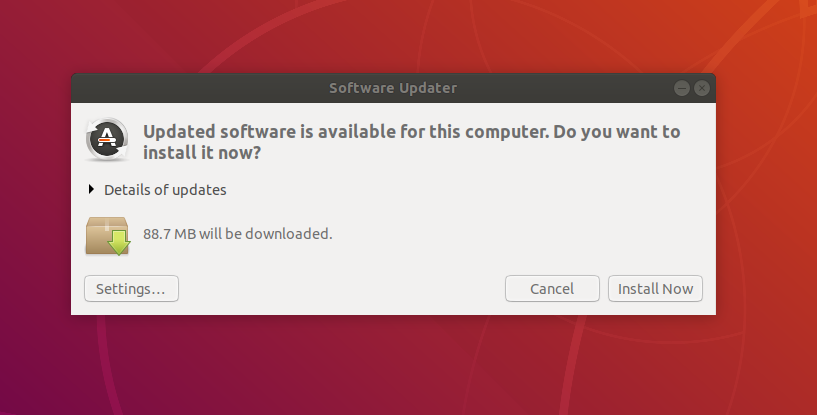
**command:**

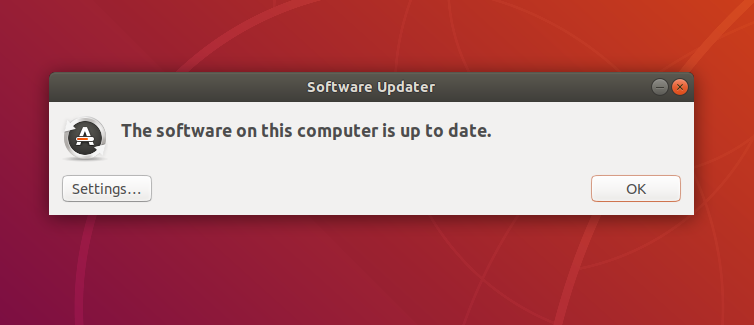
$ sudo docker ps

**Output:**

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**You’ve just successfully installed Docker on Ubuntu!**

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**Running Apache Web server and executing an HTML file**

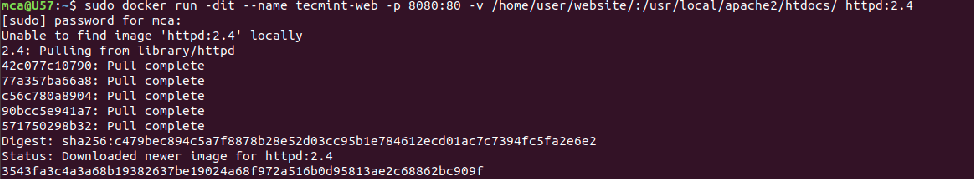
1. The public IP address on port number 8080 be directed to port 80 on the container.Also instead of serving content from the container itself, We will serve a simple web page from /home/user/website

We do this by mapping /home/user/website on the /usr/local/apache2/htdocs/ on the container. Note that you will need to use sudo or login as root to proceed, and do not omit the forward slashes at the end of each directory.

**Command:**

$ sudo docker run -dit --name tecmint-web -p 8080:80 -v /home/user/website/:/usr/local/apache2/htdocs/ httpd:2.4

**Output:**

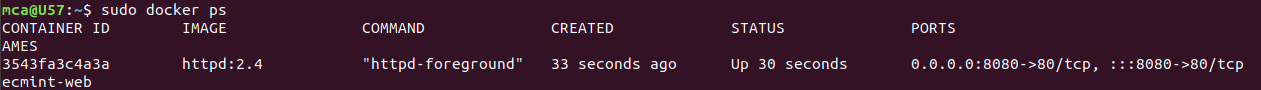


1. At this point, our Apache container should be up and running.

**Command:**

 $ sudo docker ps

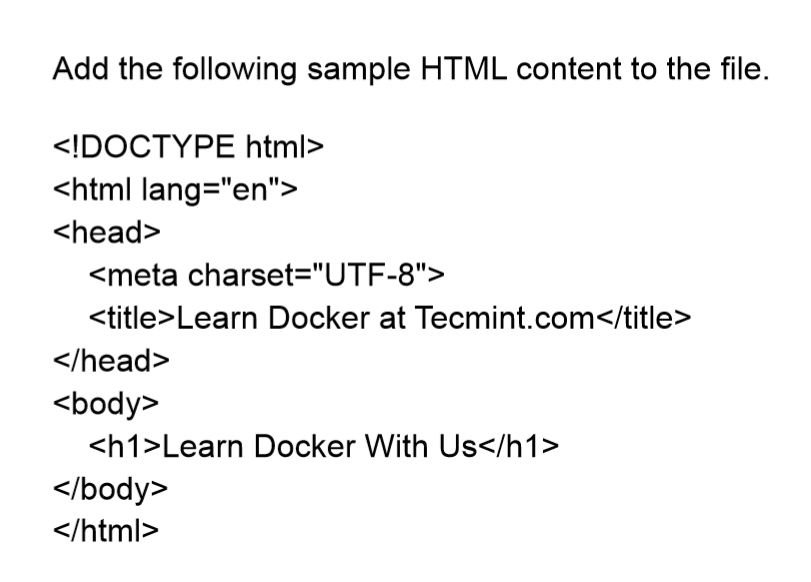
**Output:**



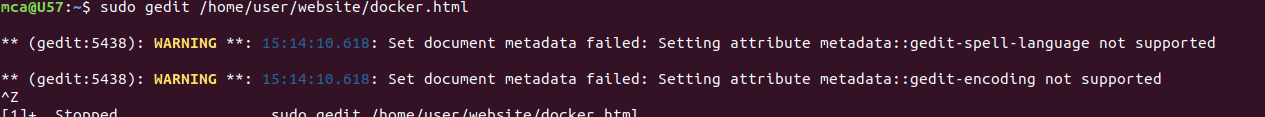
1. Now let’s create a simple web page named docker.html inside the /home/user/website directory.

**Command:**

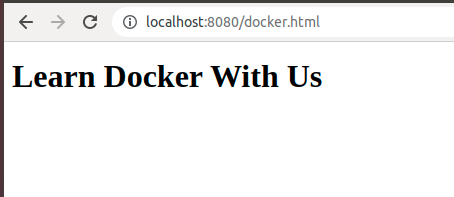
$ sudo gedit /home/user/website/docker.html



**Output:**



4. Next, point your browser to Server-IP:8080/docker.html (where Server-IP is your host’s public IP address). You should be presented with the page we created previously.



5. If you wish , you can now stop the container

**command:**

$ sudo docker stop tecmint-web

**Output:**



6. To remove the container, use the below command

**Command:**

 $ sudo docker rm tecmint-web

**Output:**



7. To finish cleaning up, you may want to delete the image that was used in the      container (omit this step if you’re planning on creating other Apache 2.4 container soon).

**Command:**

$ sudo docker image remove httpd:2.4

**Output:**

