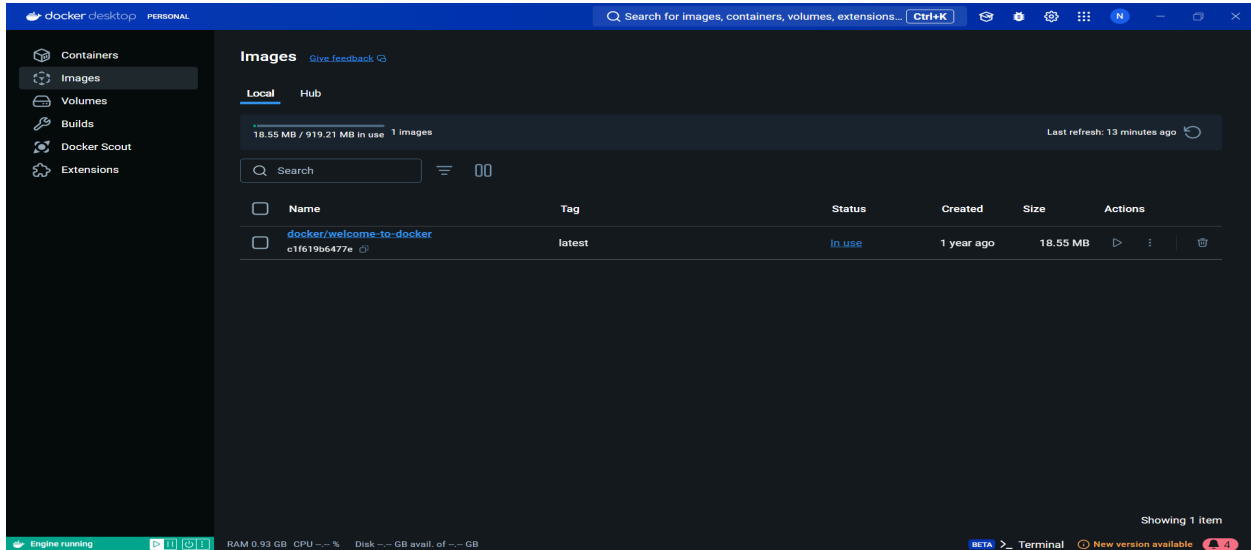


# Dockers

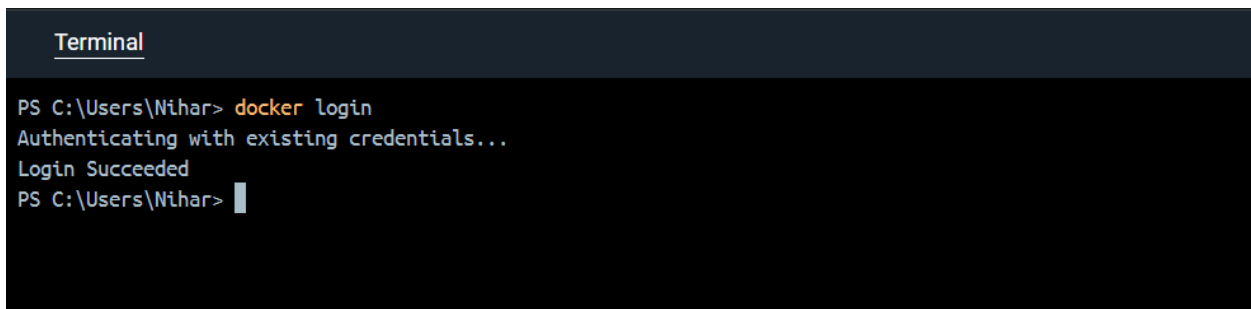
Step 1:

Open Dockers desktop and open its terminal

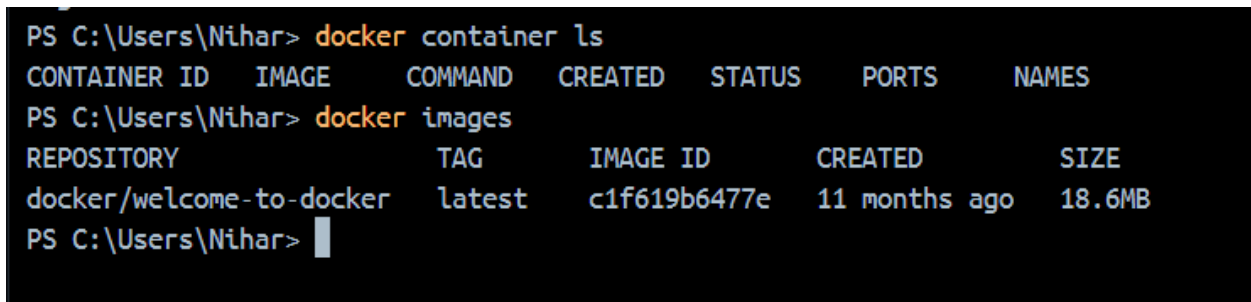


Step 2:

Login into dockers with the syntax : docker login

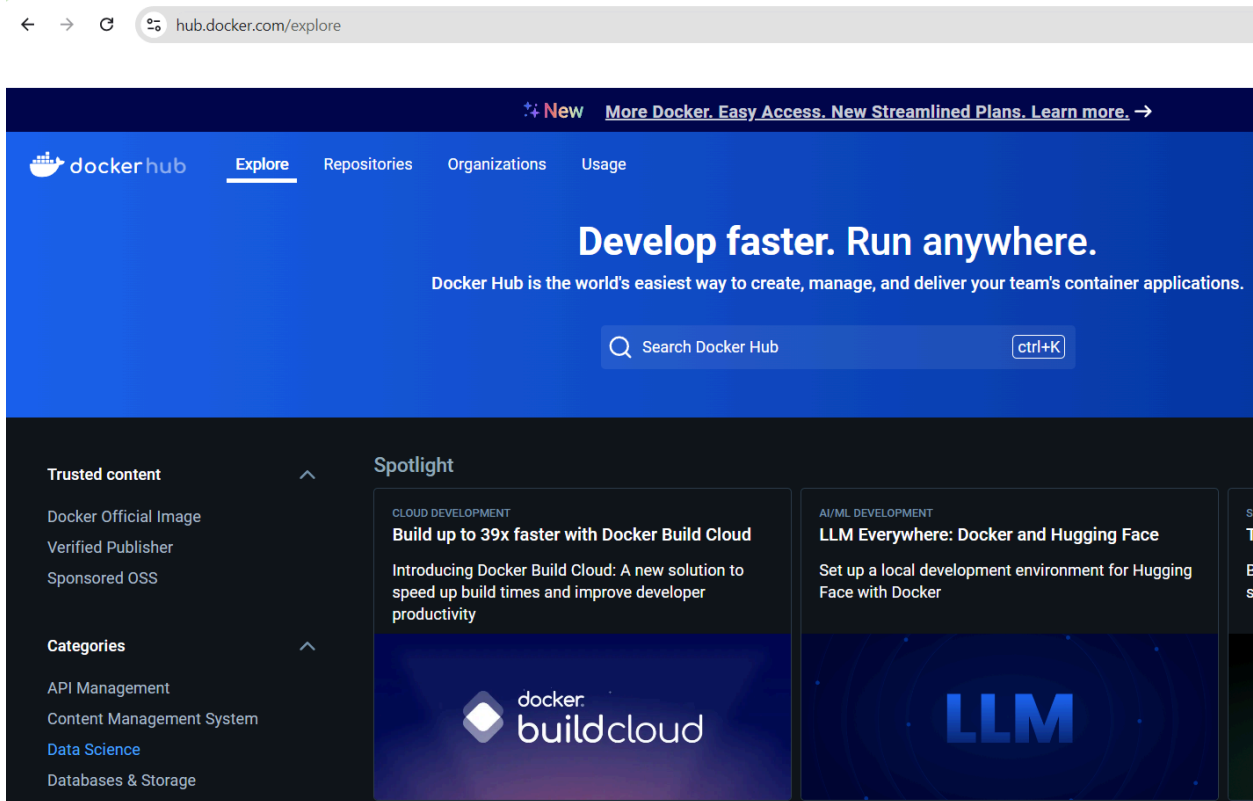


We can check existing images and containers using syntax : docker images & docker container ls

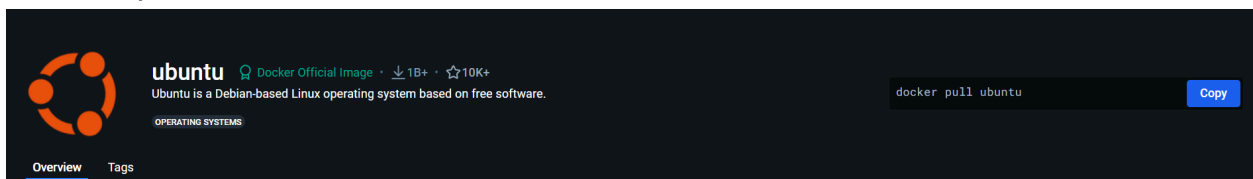


Step 3:

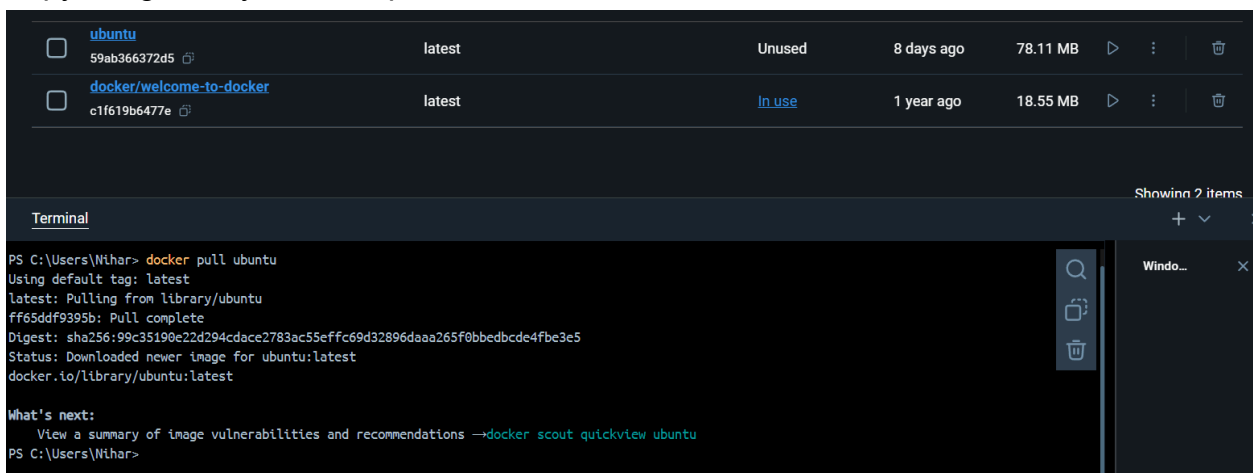
To pull a image go to the Docker hub web site : <https://hub.docker.com/explore>



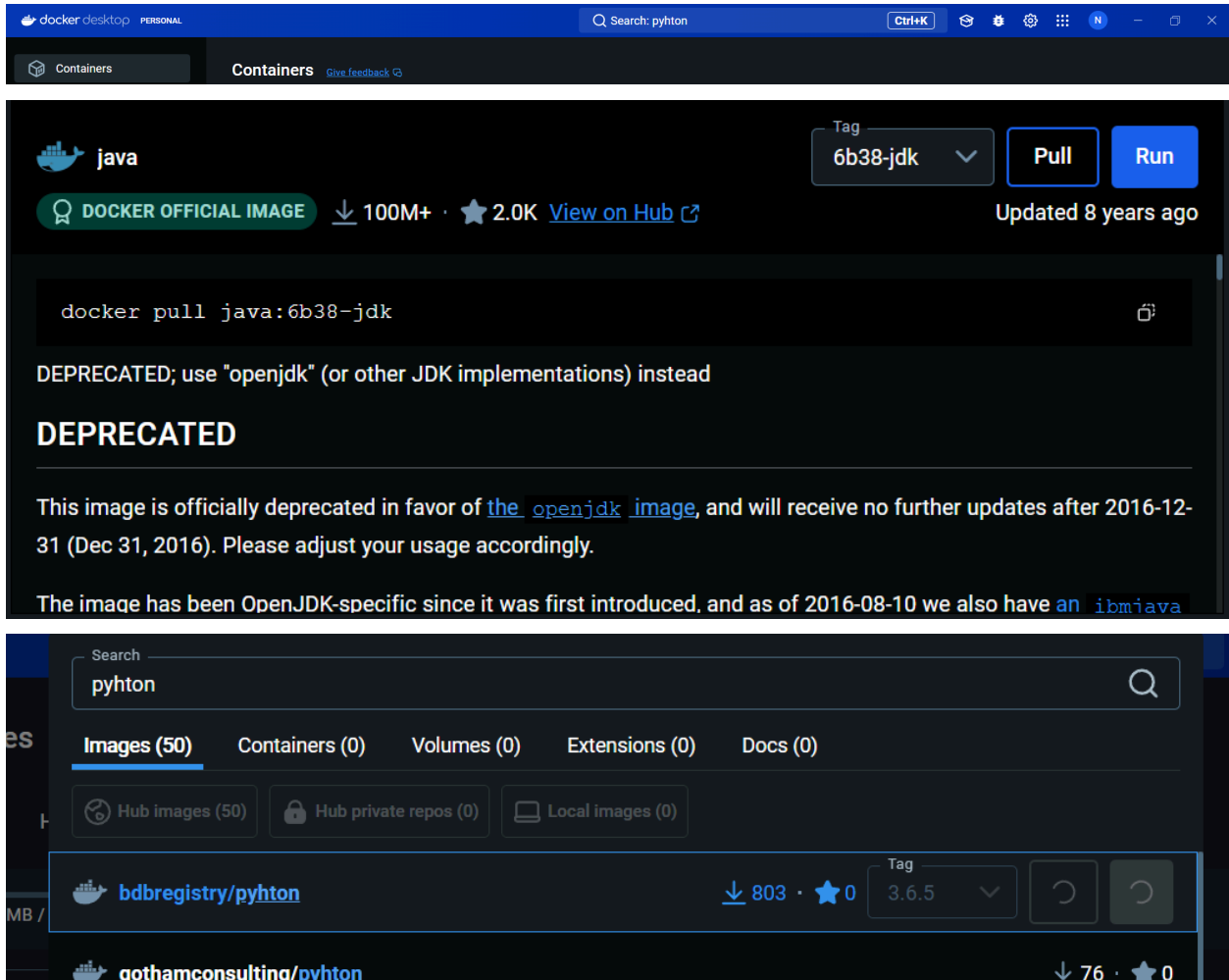
Search for the required Image u want to install  
For example : ubuntu



Copy the given syntax and paste on ur dockers terminal



U can also search for the images in the dockers Desktop



Click on pull

Step 4:

For creating and running a container the syntax is : `docker run hello-world` or `docker run -it hello-world`

```
PS C:\Users\Nihar> docker run hello-world
```

```
Hello from Docker!
```

```
This message shows that your installation appears to be working correctly.
```

```
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/
```

```
PS C:\Users\Nihar>
```

	funny_mahavira 0674aafc4e6c	hello-world	Exited	N/A 1 minute ago			
--	--------------------------------	-------------	--------	------------------	--	--	--

It creates a random named container and a image with name “hello-world”(as u named it)

Now to check the images in the docker hub the syntax

```
PS C:\Users\Nihar> docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
python              latest             a4cb00e84832       8 hours ago        1.02GB
ubuntu             latest             59ab366372d5       8 days ago         78.1MB
docker/welcome-to-docker latest          c1f619b6477e       11 months ago      18.6MB
hello-world         latest             d2c94e258dcb       17 months ago      13.3kB
openjdk             latest             71260f256d19       20 months ago      470MB
bdbregistry/pyhton  3.6.5             428984e23464       3 years ago        696MB
java                6b38-jdk          613055f01959       7 years ago        421MB
PS C:\Users\Nihar>
```

Step 5:

Now to run a container the syntax is : docker run <name of the container>

```
PS C:\Users\Nihar> docker start confident_almeida
confident_almeida
PS C:\Users\Nihar>
```

	confident_almeida da992cfd101f	ubuntu	Running	0% 1 minute ago			
	zealous_goldstine 1fdde5b2d1d7	hello-world	Exited	0% 5 minutes ago			

It will display the running status of the container

To check the status of container the syntax is : docker container ls -a

```
PS C:\Users\Nihar> docker container ls -a
CONTAINER ID   IMAGE                COMMAND              CREATED        STATUS              PORTS          NAMES
3b6c08c4b75e  bdbregistry/pyhton:3.6.5  "python3"           3 minutes ago  Exited (137) 46 seconds ago           stupefied_khayyam
0038041b2643  openjdk:8             "bash"              12 minutes ago  Exited (0) 3 minutes ago              busy_corl
d6acc55e584e  java:6b38-jdk         "/bin/bash"         15 minutes ago  Exited (139) 15 minutes ago             dreamy_carson
1fdde5b2d1d7  hello-world           "/hello"            25 minutes ago  Exited (0) 25 minutes ago             zealous_goldstine
da992cfd101f  ubuntu                "/bin/bash"         25 minutes ago  Exited (137) 18 minutes ago             confident_almeida
0674aafc4e6c  hello-world           "/hello"            28 minutes ago  Exited (0) 28 minutes ago             funny_mahavira
dbb45a5fa594  docker/welcome-to-docker:latest  "/docker-entrypoint..."  17 hours ago  Exited (0) 55 minutes ago             welcome-to-docker
PS C:\Users\Nihar>
```

And to exit the container

```
PS C:\Users\Nihar> docker stop confident_almeida
confident_almeida
PS C:\Users\Nihar>
```

<input type="checkbox"/>	<a href="#">confident_almeida</a> da992cfd101f	<a href="#">ubuntu</a>	Exited (137)	N/A	3 minutes ago	▶	⋮	🗑
<input type="checkbox"/>	<a href="#">zealous_goldstine</a> 1f6de5b2d1d7	<a href="#">hello-world</a>	Exited	N/A	7 minutes ago	▶	⋮	🗑

Step 6:

Running a code in the docker

Download a java / python image from the search bar as we done before

Pull it to ur docker hub

For example:

<input type="checkbox"/>	<a href="#">openjdk</a> 71260f256d19	latest	Unused	2 years ago	469.93 MB	▶	⋮	🗑
<input type="checkbox"/>	<a href="#">bdbregistry/pyhton</a> 428984e23464	3.6.5	Unused	4 years ago	695.58 MB	▶	⋮	🗑
<input type="checkbox"/>	<a href="#">java</a> 613055f01959	6b38-jdk	Unused	8 years ago	420.72 MB	▶	⋮	🗑

Showing 7 items

<input type="checkbox"/>	<a href="#">openjdk</a> b273004037cc	8	In use	2 years ago	526.04 MB	▶	⋮	🗑
<input type="checkbox"/>	<a href="#">bdbregistry/pyhton</a> 428984e23464	3.6.5	Unused	4 years ago	695.58 MB	▶	⋮	🗑

Run the image

For example : docker run -it openjdk:8

```
9daef329d350: Pull complete
d85151f15b66: Pull complete
52a8c426d30b: Pull complete
8754a66e0050: Pull complete
Digest: sha256:86e863cc57215cfb181bd319736d0baf625fe8f150577f9eb58bd937f5452cb8
Status: Downloaded newer image for openjdk:8
root@0038041b2643:/#
```

This will open ur image where u can edit it or add codes

For example:

```
root@0038041b2643:/# touch hello-world.java
root@0038041b2643:/# ls
bin boot dev etc hello-world.java home lib lib64 media mnt opt proc root run sbin srv sys tmp usr var
root@0038041b2643:/#
```

```
root@65e59f7a3e26:/# cat >>helloworld.java
class helloworld{
public static void main(String args []){
System.out.println("Hello World!")
}
}^C
```

Perform a simple code in it

```
root@65e59f7a3e26:/# javac helloworld.java
root@65e59f7a3e26:/# java helloworld
Hello World!
root@65e59f7a3e26:/# exit
exit
```

Step 6:

In a same way u can perform the python code

```
PS C:\Users\Nihar> docker run -it bdbregistry/pyhton:3.6.5
Python 3.6.5 (default, Jun 27 2018, 08:22:23)
[GCC 4.9.2] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>> print ("Hello")
Hello
>>> █
```