

# **20MCA136-NETWORKING & ADMINISTRATION LAB**

## **Docker Installation & Run Ubuntu image in docker**

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Since no Hyper-V backend and Windows container in the System

### Step 1: Install WSL 2 backend

Open windows PowerShell as administrator as run then command:

```
dism.exe /online /enable-feature /featurename:Microsoft-Windows-Subsystem-Linux /all /norestart
```

### Step 2: Enable Virtual Machine feature

Open windows PowerShell as administrator and run

```
dism.exe /online /enable-feature /featurename:VirtualMachinePlatform /all /norestart
```

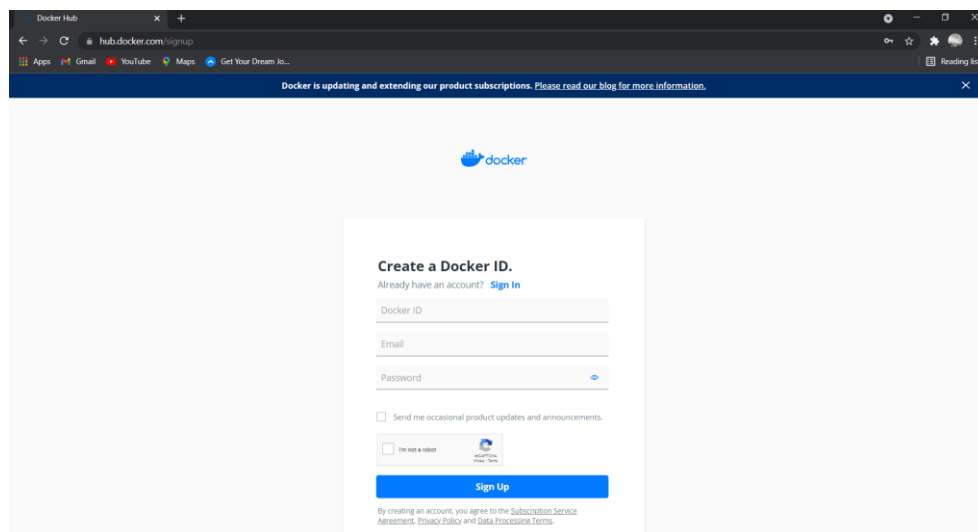
### Step 3: Download the linux kernel update package from

<https://docs.microsoft.com/en-us/windows/wsl/install-manual>

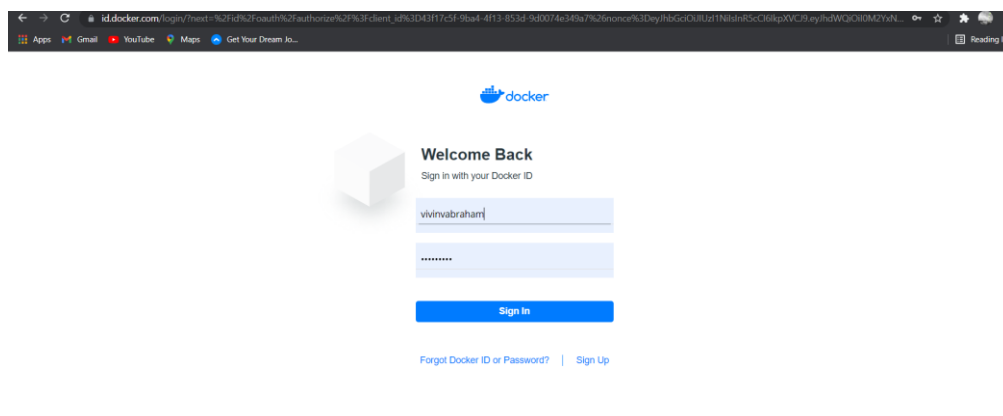
And run and check version in powershell by

```
wsl --set-default-version 2
```

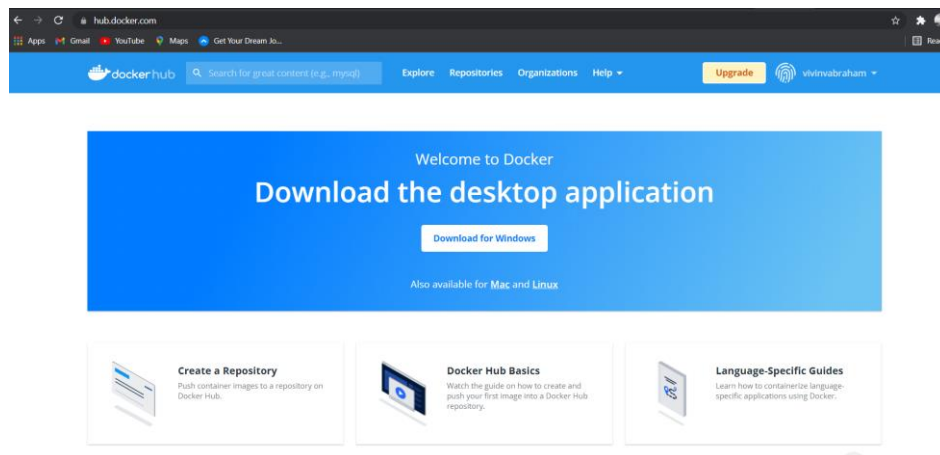
- Create an account in <https://hub.docker.com/>



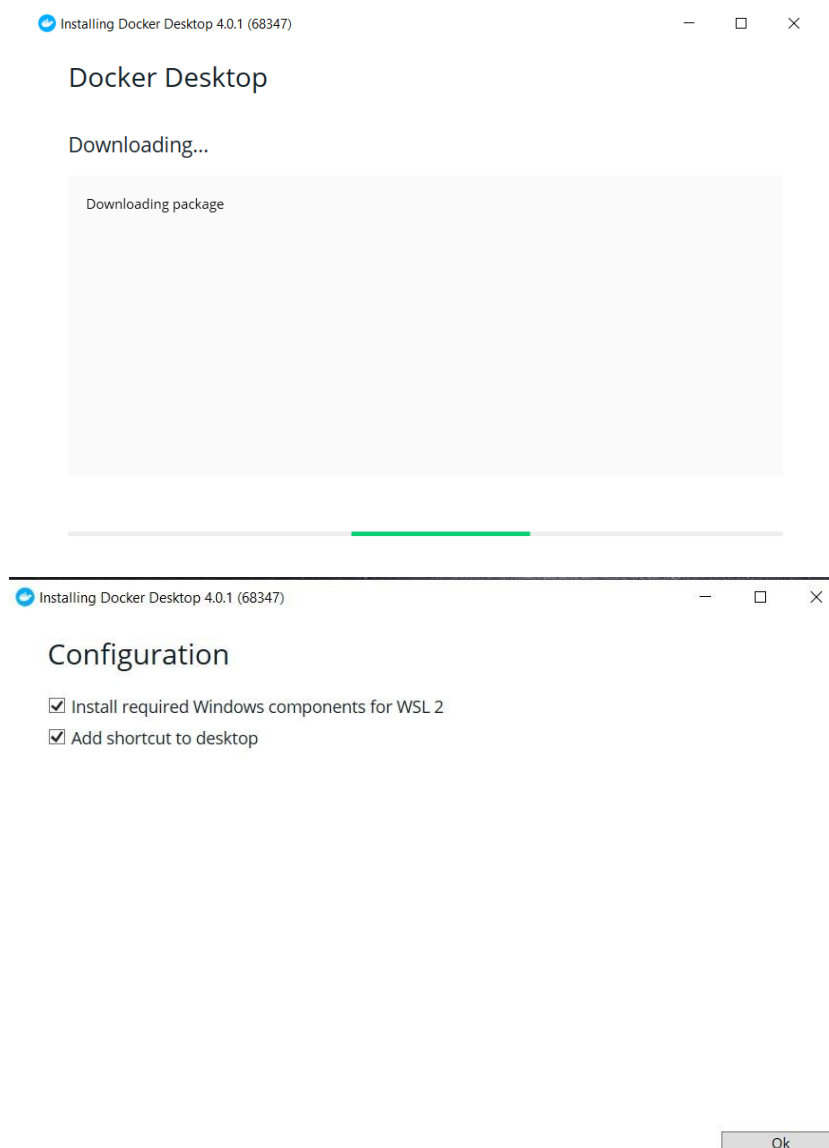
- Sign in



## ➤ Download Docker for desktop



## ➤ Run Docker desktop installer



➤ **Open cmd as run as administrator**

To check docker work properly

```
C:\Windows\System32\cmd.exe
(c) Microsoft Corporation. All rights reserved.

C:\Program Files\Docker\Docker>docker

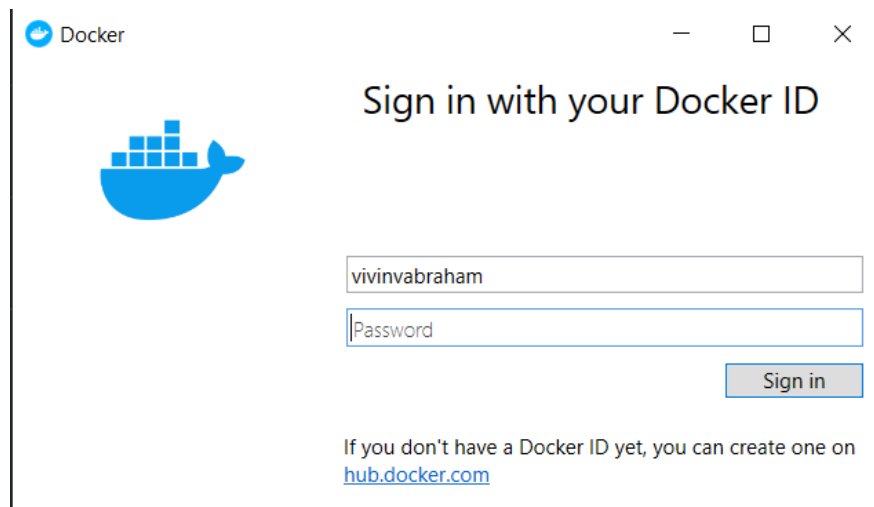
Usage: docker [OPTIONS] COMMAND

A self-sufficient runtime for containers

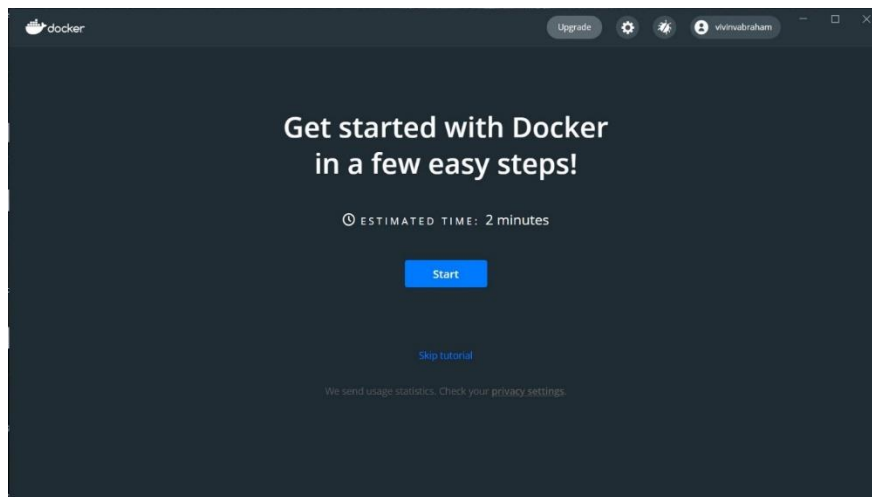
Options:
  --config string      Location of client config files (default
                        "C:\\Users\\hp\\.docker")
  -c, --context string  Name of the context to use to connect to the
                        daemon (overrides DOCKER_HOST env var and
                        default context set with "docker context use")
  -D, --debug           Enable debug mode
  -H, --host list       Daemon socket(s) to connect to
  -l, --log-level string Set the logging level
                        ("debug"|"info"|"warn"|"error"|"fatal")
                        (default "info")
  --tls                Use TLS; implied by --tlsverify
  --tlscacert string    Trust certs signed only by this CA (default
                        "C:\\Users\\hp\\.docker\\ca.pem")
  --tlscert string      Path to TLS certificate file (default
                        "C:\\Users\\hp\\.docker\\cert.pem")
  --tlskey string       Path to TLS key file (default
                        "C:\\Users\\hp\\.docker\\key.pem")
  --tlsverify           Use TLS and verify the remote
  -v, --version         Print version information and quit

Management Commands:
```

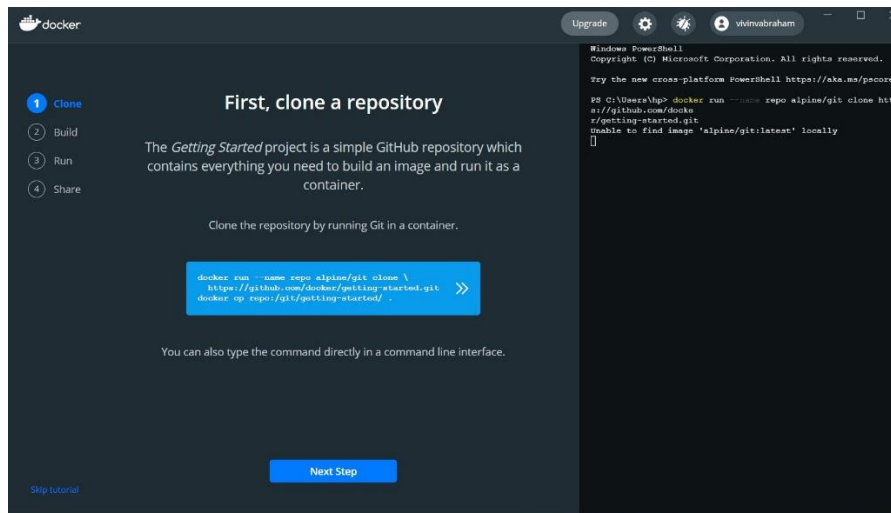
➤ **Open docker desktop and Sign in**



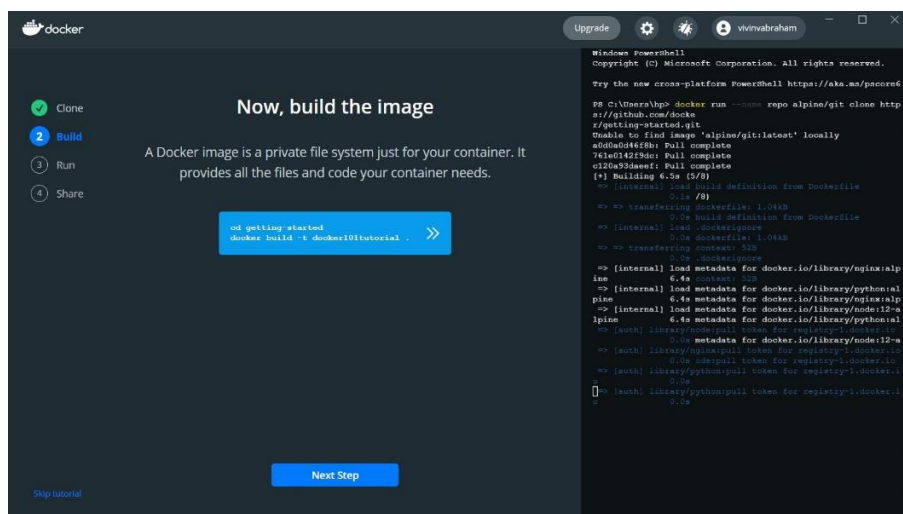
## ➤ Trial Steps to create container



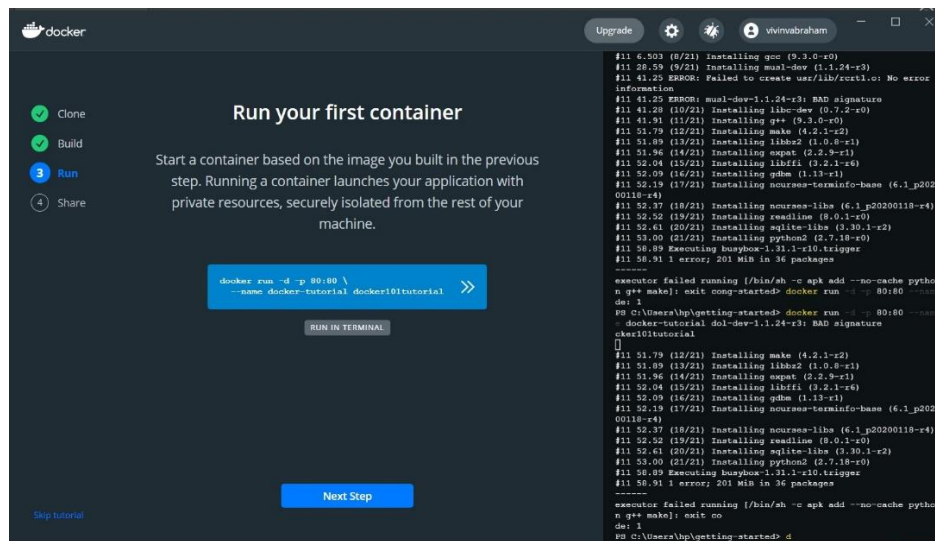
## ➤ Clone



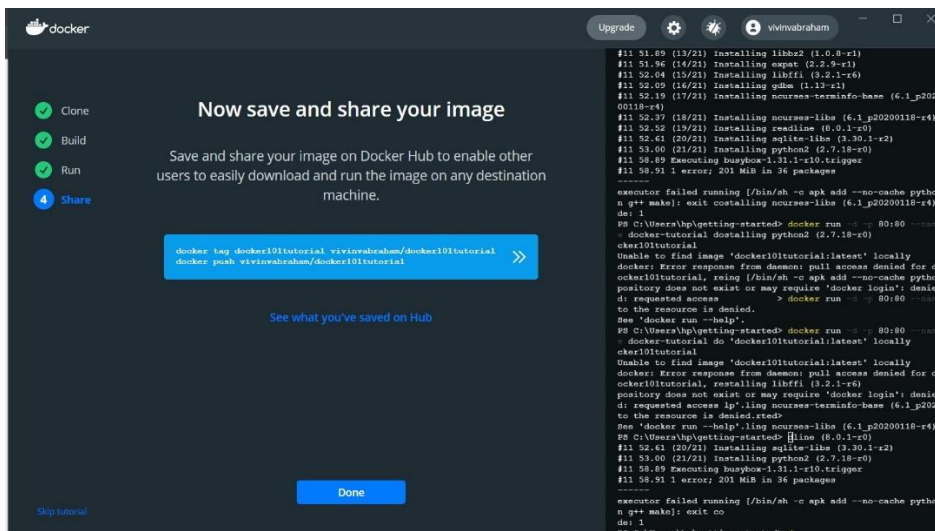
## ➤ Build



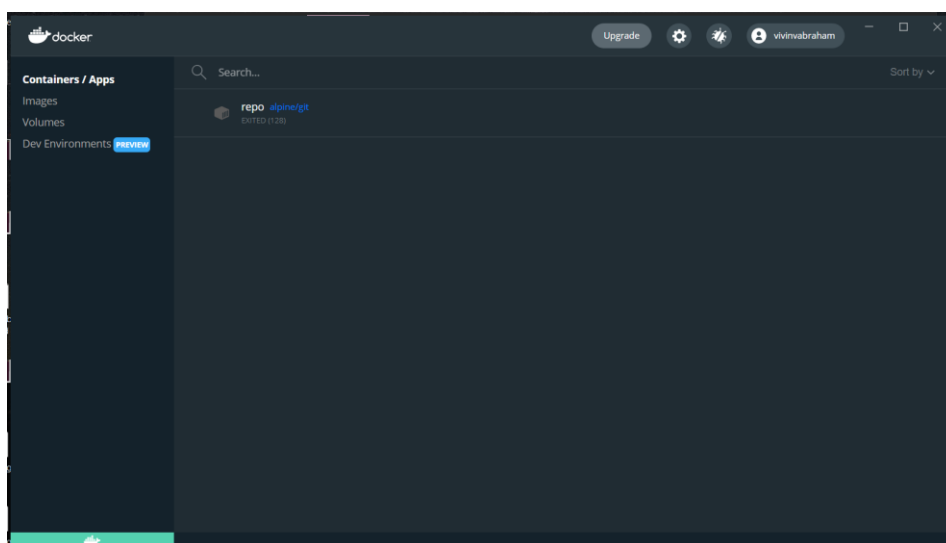
## ➤ Run



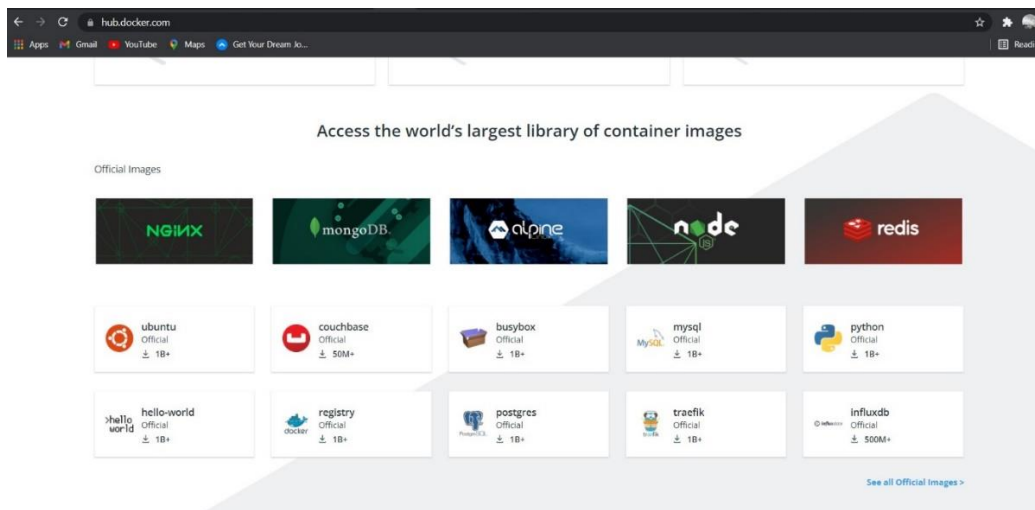
## ➤ Share



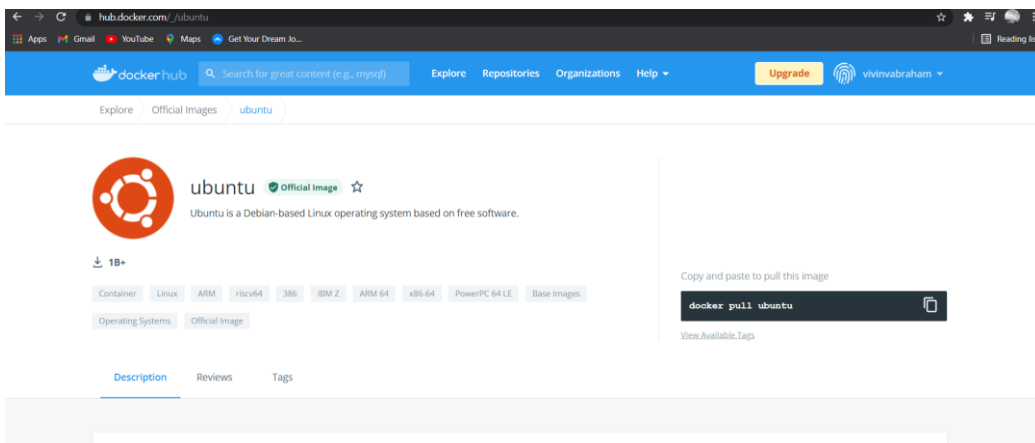
## ➤ After this



- Go to <https://hub.docker.com/> select image of ubuntu



- Copy the command



- And run that on cmd

```
C:\Windows\System32\cmd.exe

search      Search the Docker Hub for images
start       Start one or more stopped containers
stats       Display a live stream of container(s) resource usage statistics
stop        Stop one or more running containers
tag         Create a tag TARGET_IMAGE that refers to SOURCE_IMAGE
top         Display the running processes of a container
unpause     Unpause all processes within one or more containers
update      Update configuration of one or more containers
version     Show the Docker version information
wait        Block until one or more containers stop, then print their exit codes

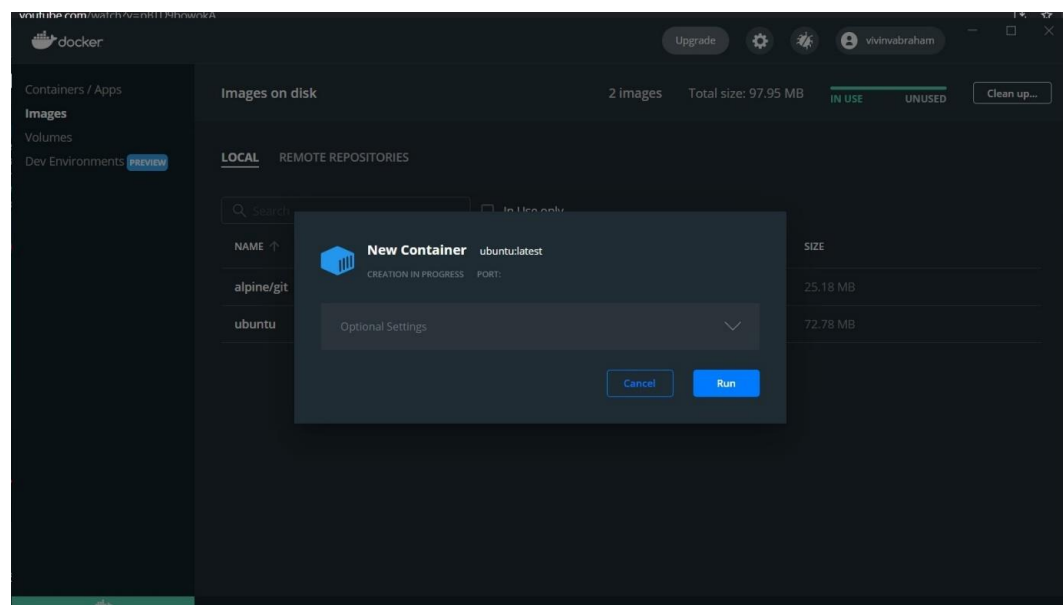
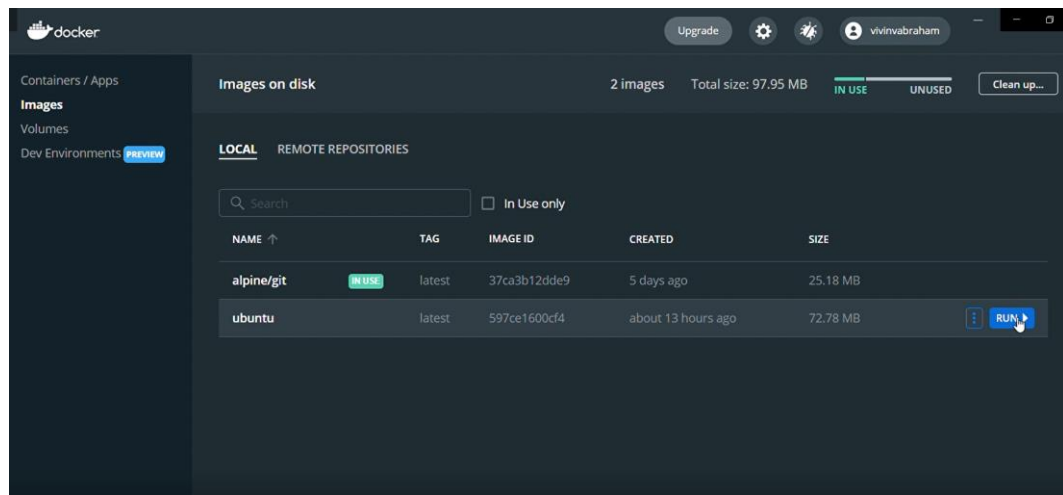
Run 'docker COMMAND --help' for more information on a command.

To get more help with docker, check out our guides at https://docs.docker.com/go/guides/

C:\Program Files\Docker\Docker>docker pull ubuntu
Using default tag: latest
latest: Pulling from library/ubuntu
35807b77a593: Pull complete
Digest: sha256:9d6a8699fb5c9c39cf08a0871bd6219f0400981c570894cd8cbea30d3424a31f
Status: Downloaded newer image for ubuntu:latest
docker.io/library/ubuntu:latest

C:\Program Files\Docker\Docker>
```

## ➤ Run ubuntu from docker



## ➤ Another screen will open

