Experiment No : 5

Title: Implementation of Docker commands

Objectives: To implement Docker commands.

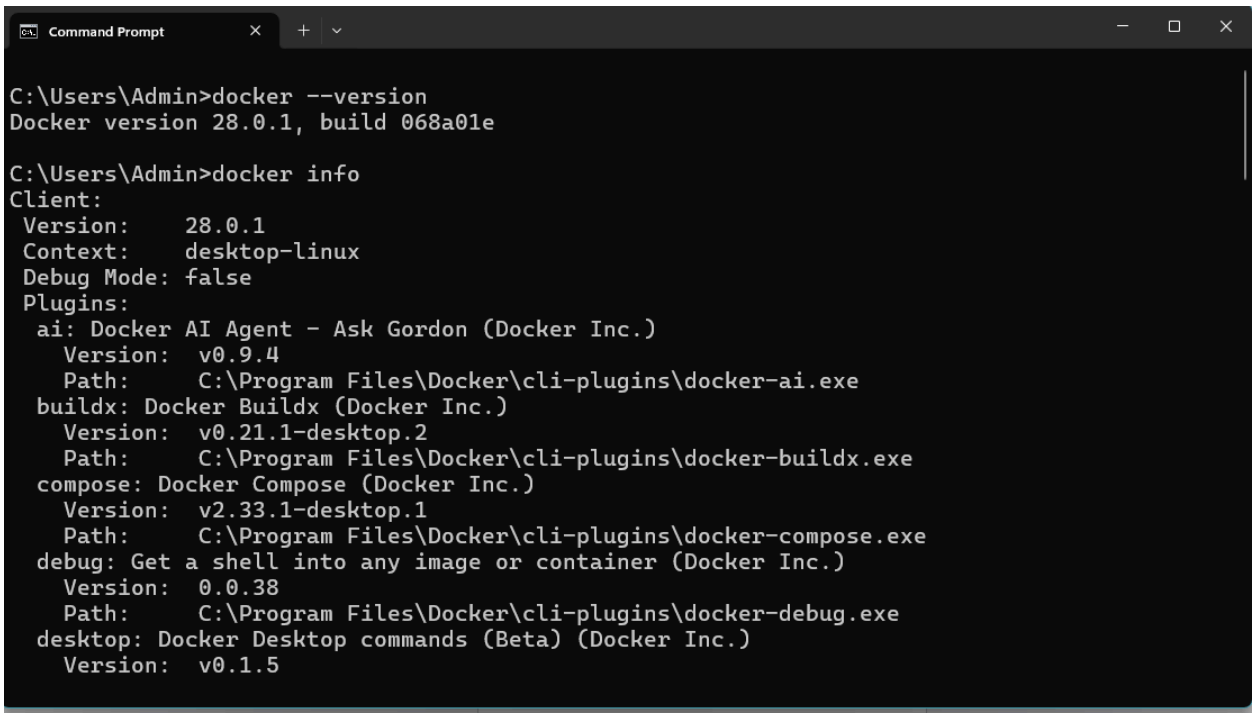
Steps

Step 1: Install Docker on Windows

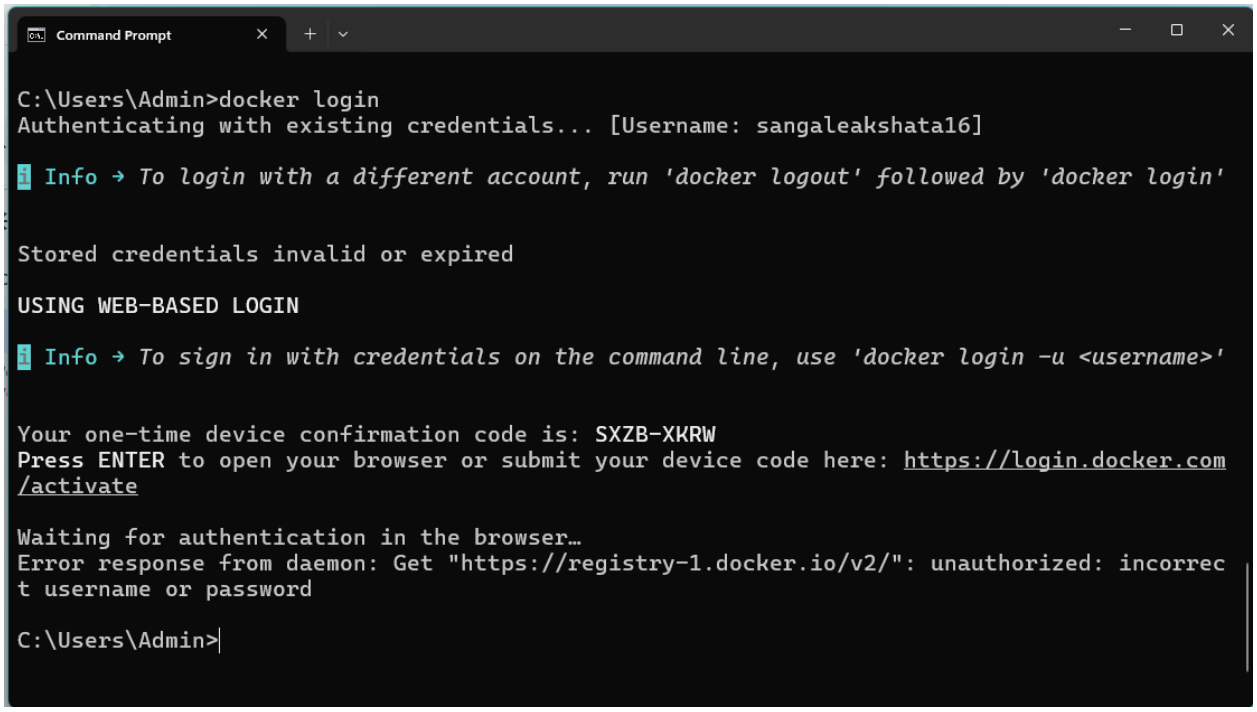
Verify Installation

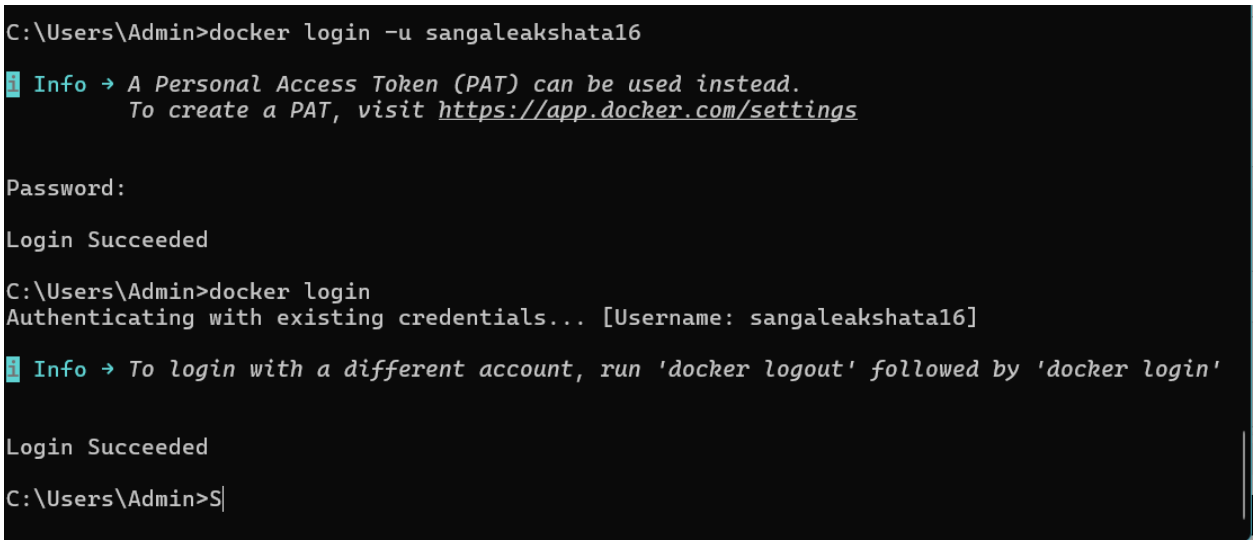
Open Command Prompt (cmd) and run

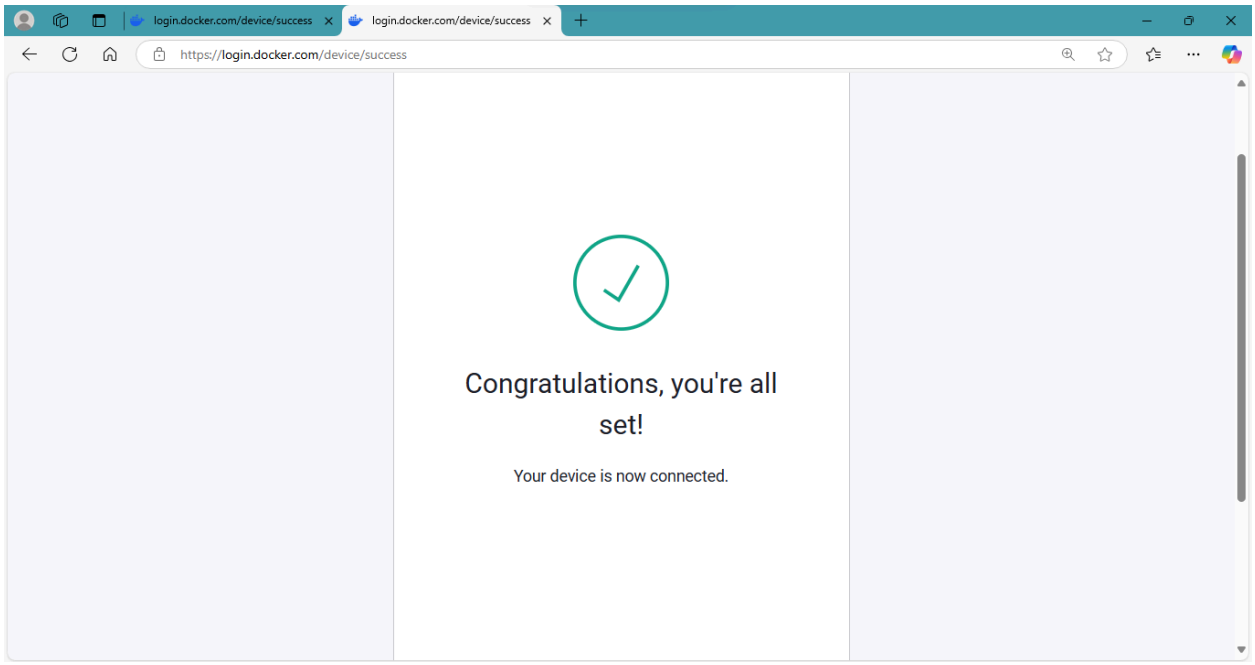
Check if Docker Daemon is Running



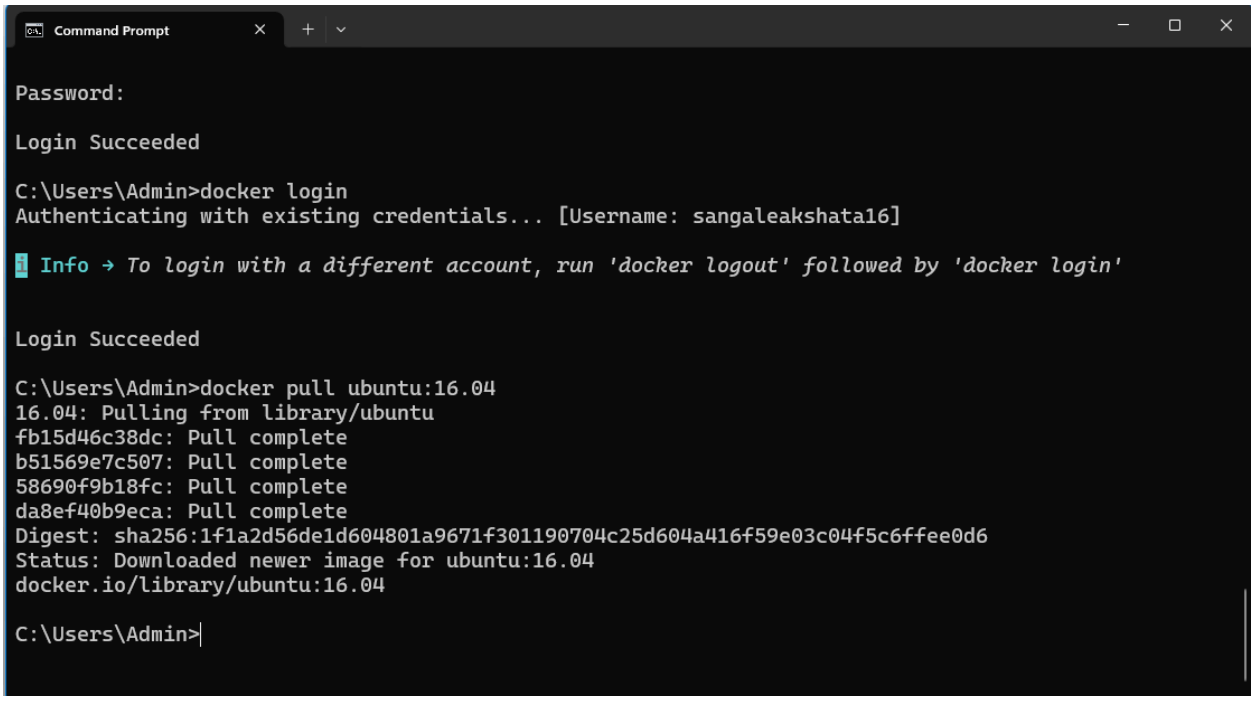
Step 2: Log in to Docker Hub


Command Prompt
C:\Users\Admin>docker login
Authenticating with existing credentials... [Username: sangaleakshata16]
i Info → To login with a different account, run 'docker logout' followed by 'docker login'
Stored credentials invalid or expired
USING WEB-BASED LOGIN
i Info → To sign in with credentials on the command line, use 'docker login -u <username>'
Your one-time device confirmation code is: SXZB-XKRW
Press ENTER to open your browser or submit your device code here: https://login.docker.com/activate
Waiting for authentication in the browser…
Error response from daemon: Get "https://registry-1.docker.io/v2/": unauthorized: incorrect username or password
C:\Users\Admin>


C:\Users\Admin>docker login -u sangaleakshata16
i Info → A Personal Access Token (PAT) can be used instead.
To create a PAT, visit https://app.docker.com/settings
Password:
Login Succeeded
C:\Users\Admin>docker login
Authenticating with existing credentials... [Username: sangaleakshata16]
i Info → To login with a different account, run 'docker logout' followed by 'docker login'
Login Succeeded
C:\Users\Admin>S



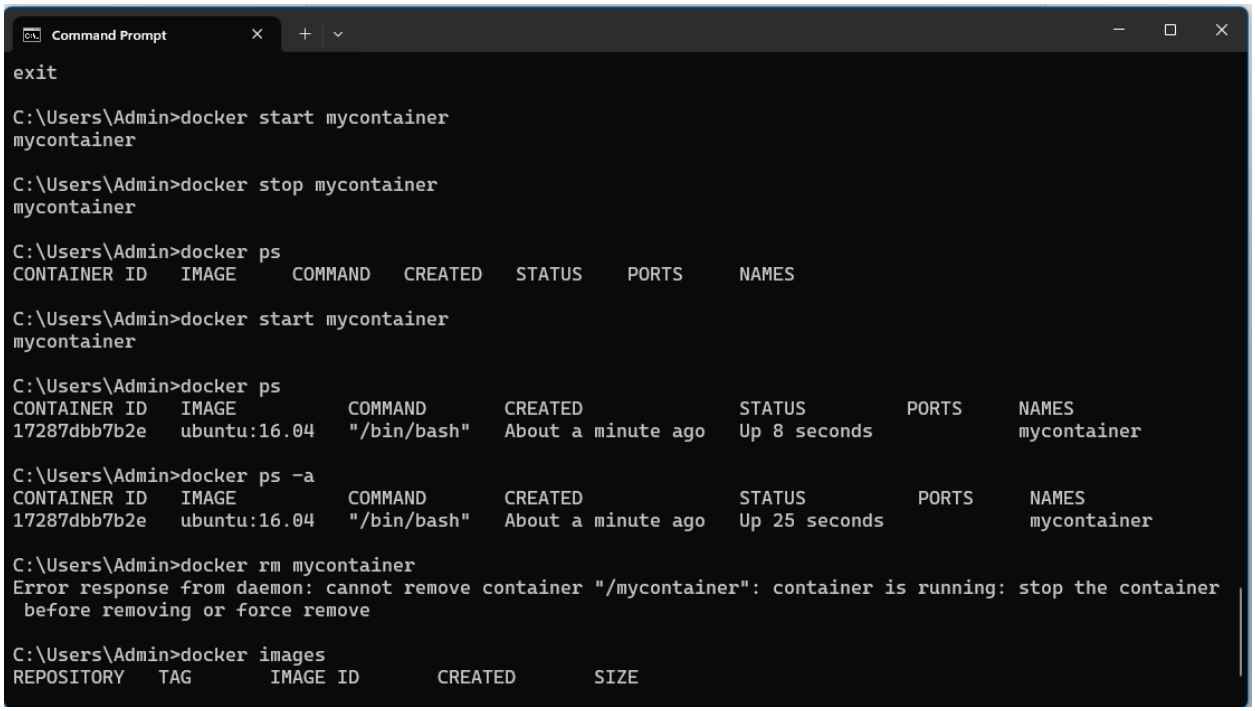
Step 3: Pull an Image from Docker Hub



Step 4: Run a Container

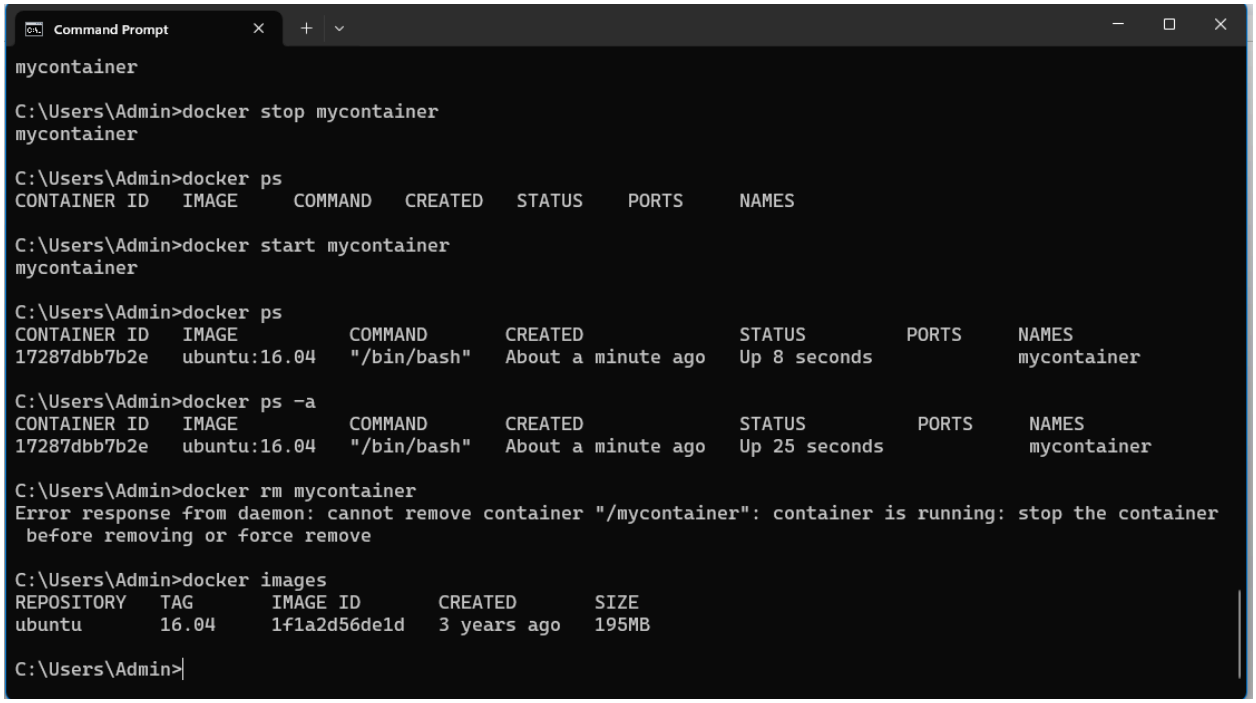
```
C:\Users\Admin>docker run --name mycontainer -it ubuntu:16.04 /bin/bash
root@17287dbb7b2e:/# exit
exit

C:\Users\Admin>
```

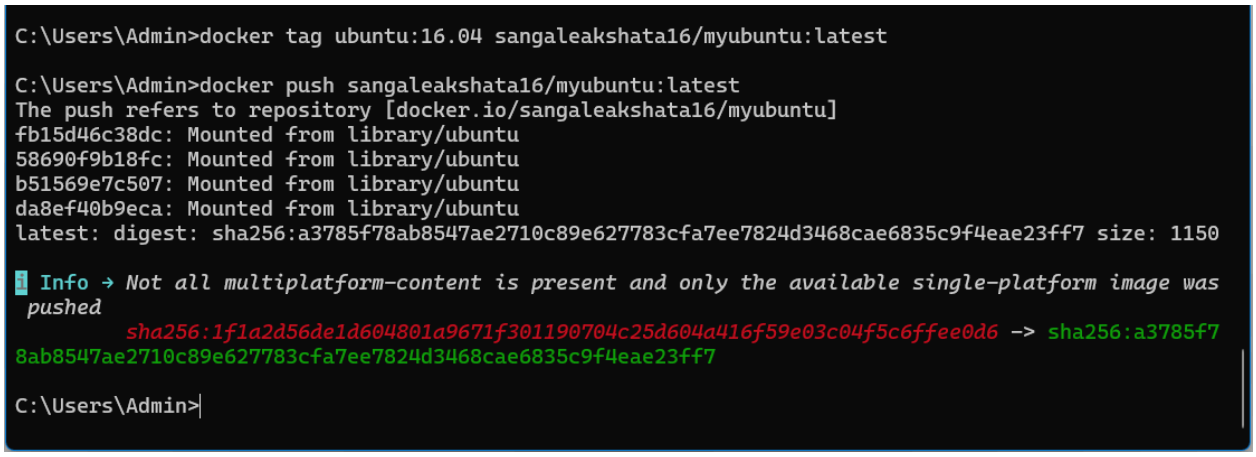
Step 5: Start and Stop a Container



Step 6: List Containers

Step 7: Remove a Container



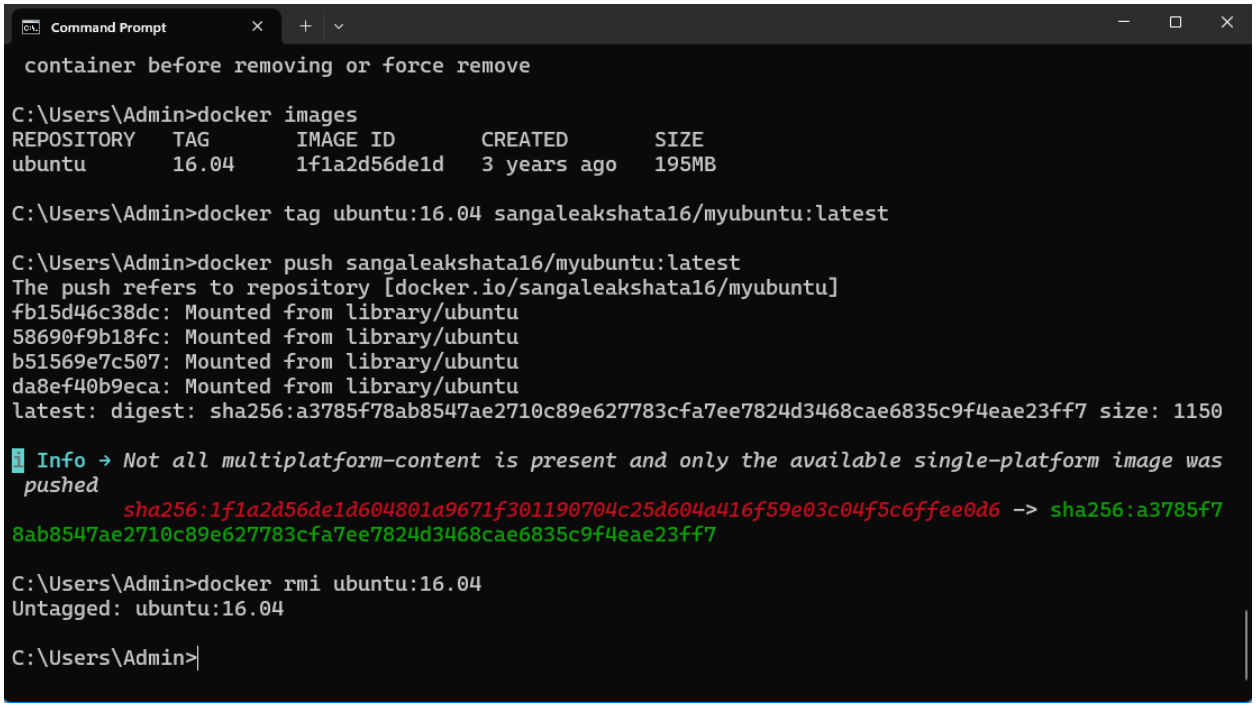


Step 8: List Images

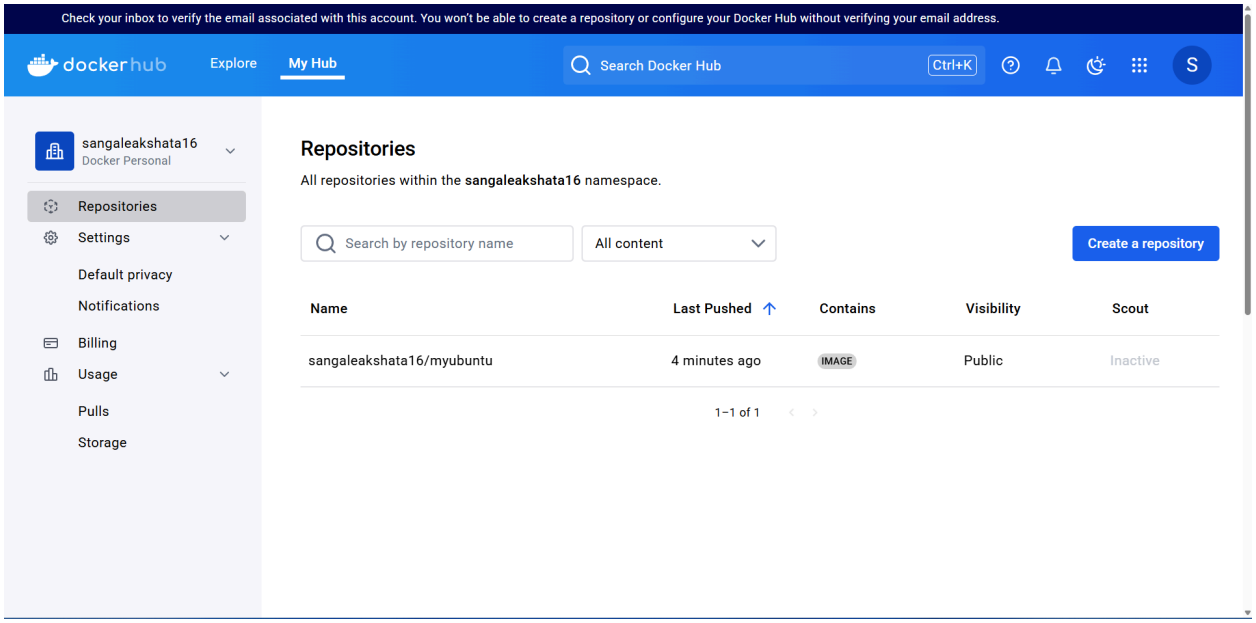
Step 9: Push an Image to Docker Hub

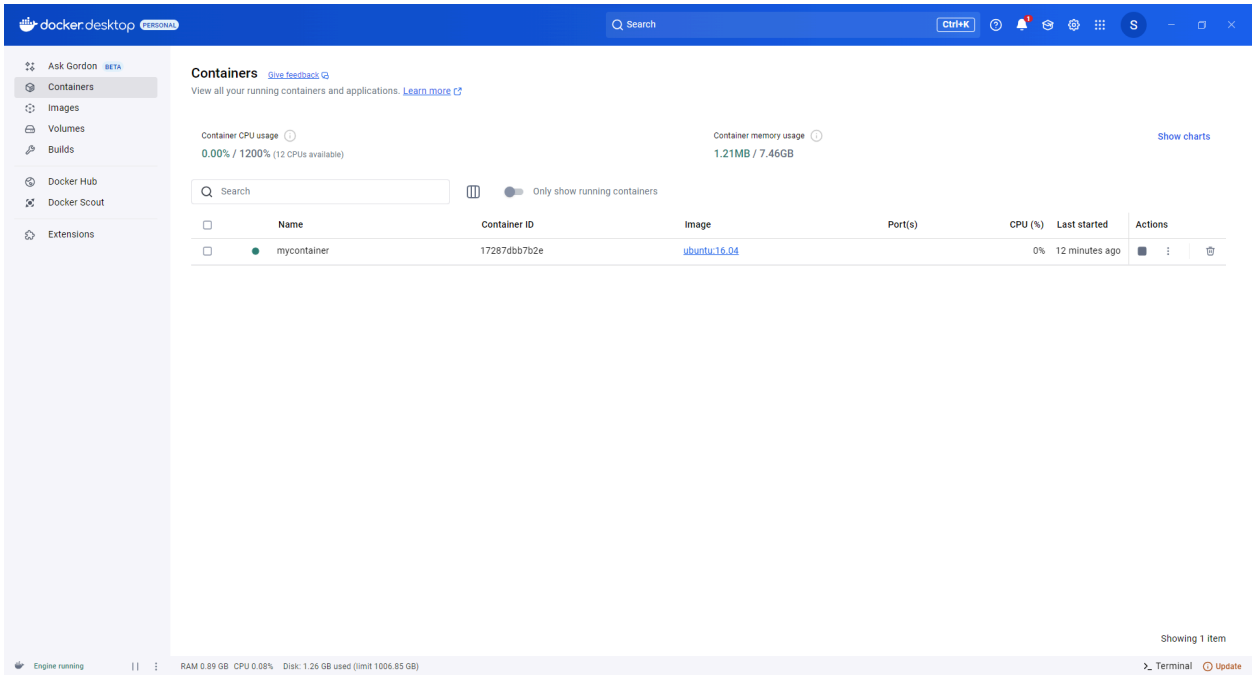
Step 10: Clean Up Docker

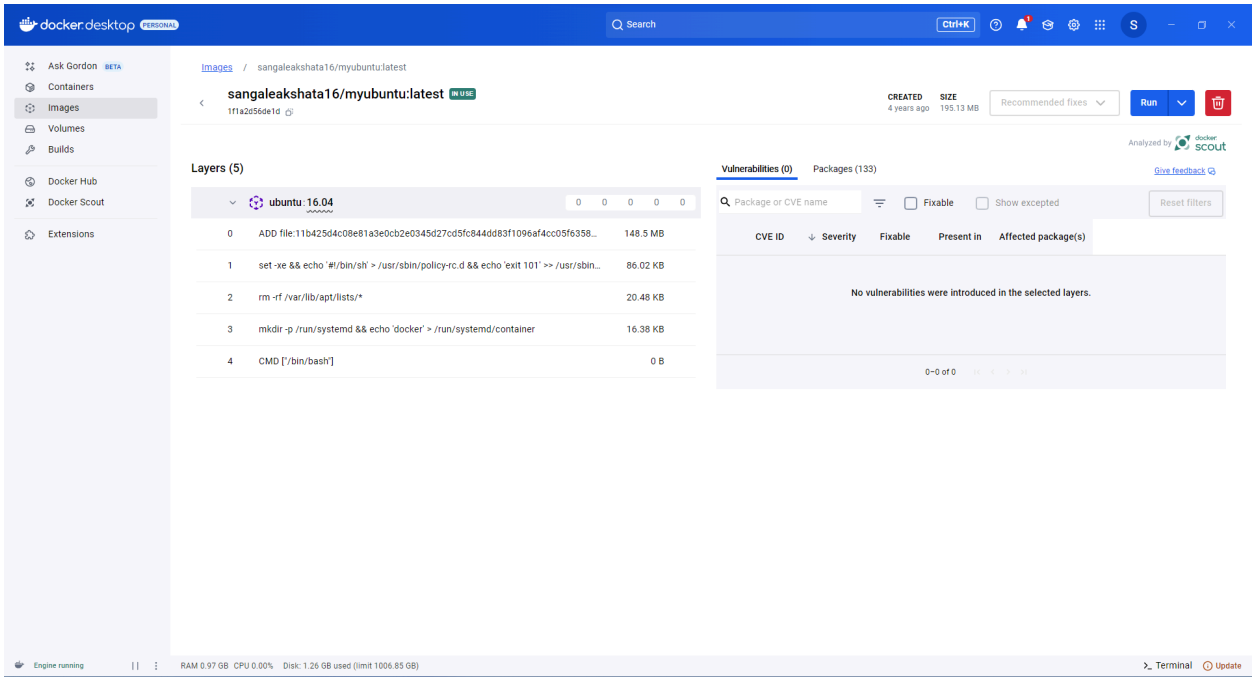
docker rmi ubuntu:16.04

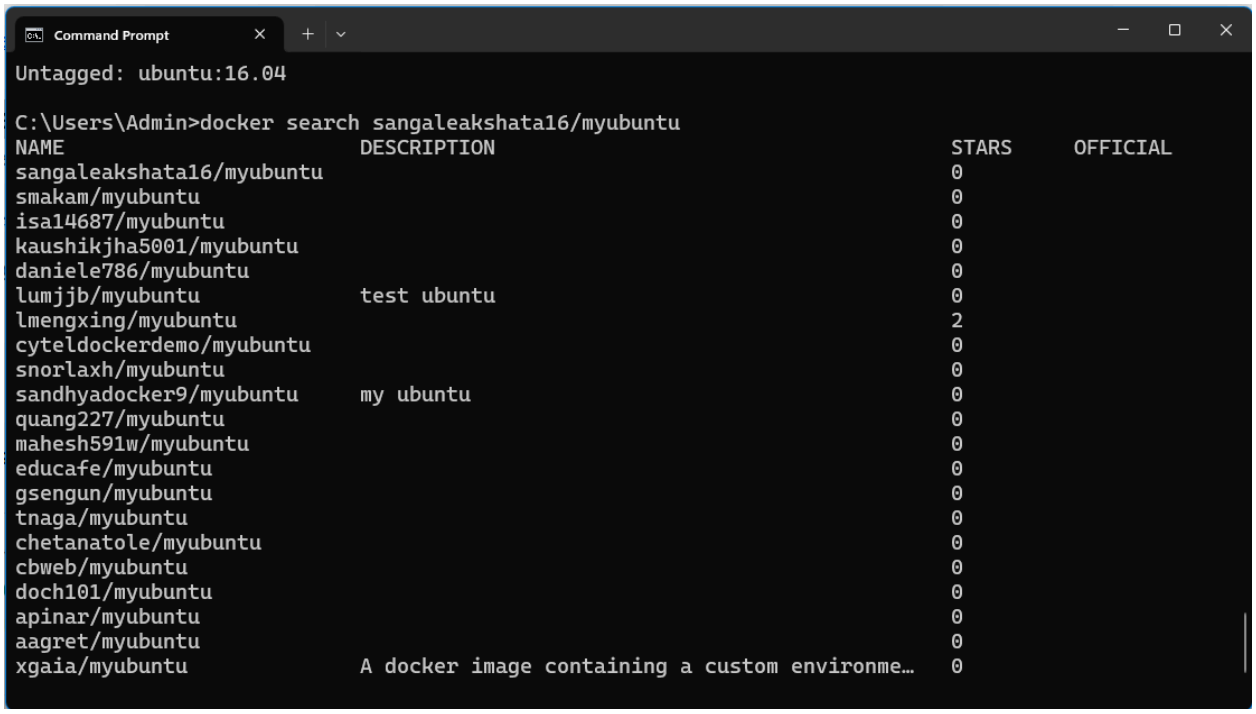


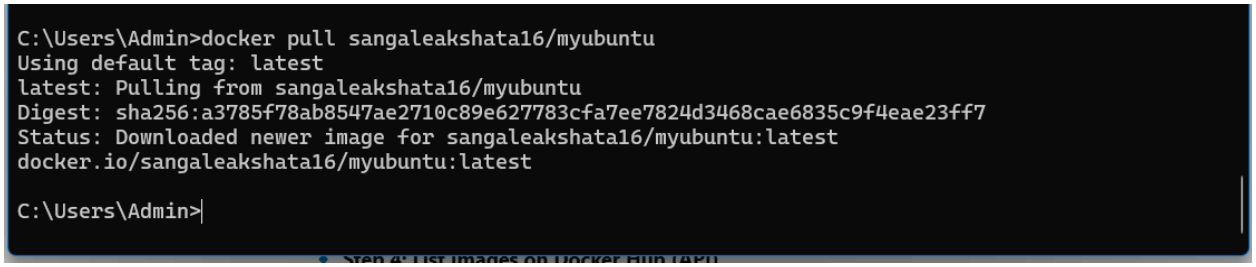
Step 11: to chek the successfully uplod on the Docker




docker desktop PERSONAL
Search
Ctrl+K
Ask Gordon BETA
Containers
Images
Volumes
Builds
Docker Hub
Docker Scout
Extensions
Containers
Give feedback
View all your running containers and applications. Learn more
Container CPU usage
0.00% / 1200% (12 CPUs available)
Container memory usage
1.21MB / 7.46GB
Show charts
Search
Only show running containers
Name
Container ID
Image
Port(s)
CPU (%)
Last started
Actions
mycontainer
17287dbb7b2e
ubuntu:16.04
0%
12 minutes ago
Showing 1 item
Engine running
RAM 0.89 GB CPU 0.08% Disk: 1.26 GB used (limit 1006.85 GB)
Terminal
Update


docker desktop PERSONAL
Search
Ctrl+K
Ask Gordon BETA
Containers
Images
Volumes
Builds
Docker Hub
Docker Scout
Extensions
Images / sangaleakshata16/myubuntu:latest
sangaleakshata16/myubuntu:latest
IN USE
1f1a2d56de1d
CREATED
4 years ago
SIZE
195.13 MB
Recommended fixes
Run
Analyzed by docker scout
Layers (5)
ubuntu:16.04
0 0 0 0 0
0 ADD file:11b425d4c08e81a3e0cb2e0345d27cd5fc844dd83f1096af4cc05f6358... 148.5 MB
1 set -xe && echo '#!/bin/sh' > /usr/sbin/policy-rc.d && echo 'exit 101' >> /usr/sbin... 86.02 KB
2 rm -rf /var/lib/apt/lists/* 20.48 KB
3 mkdir -p /run/systemd && echo 'docker' > /run/systemd/container 16.38 KB
4 CMD ["/bin/bash"] 0 B
Vulnerabilities (0)
Packages (133)
Give feedback
Package or CVE name
Fixable
Show excepted
Reset filters
CVE ID
Severity
Fixable
Present in
Affected package(s)
No vulnerabilities were introduced in the selected layers.
0–0 of 0
Engine running
RAM 0.97 GB CPU 0.00% Disk: 1.26 GB used (limit 1006.85 GB)
Terminal
Update





Conclusion:

In this experiment, we successfully executed various Docker commands for container management, including pulling images, running, starting, stopping, and removing containers. We also listed available images, pushed an image to Docker Hub, and verified the process. This helped us understand containerization and how Docker simplifies application deployment.