Lab Notebook Week 4
Submitted By: Shrikrishna Bhat

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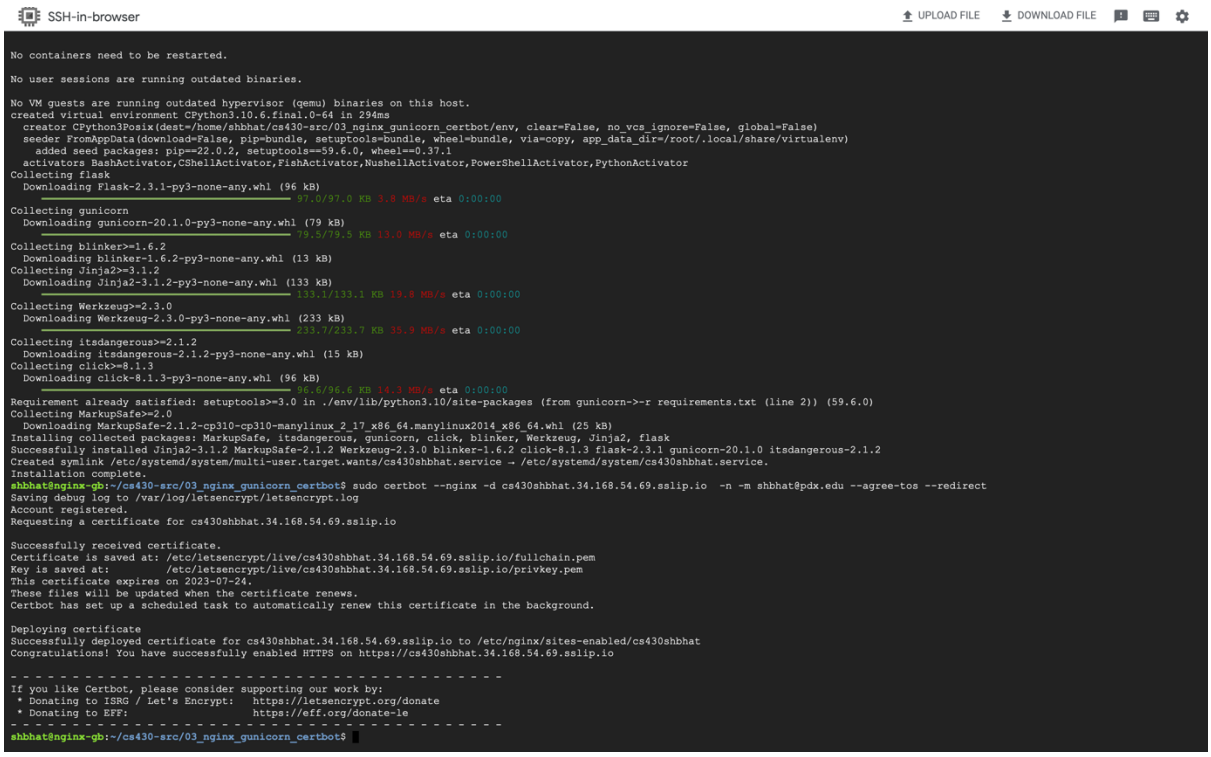
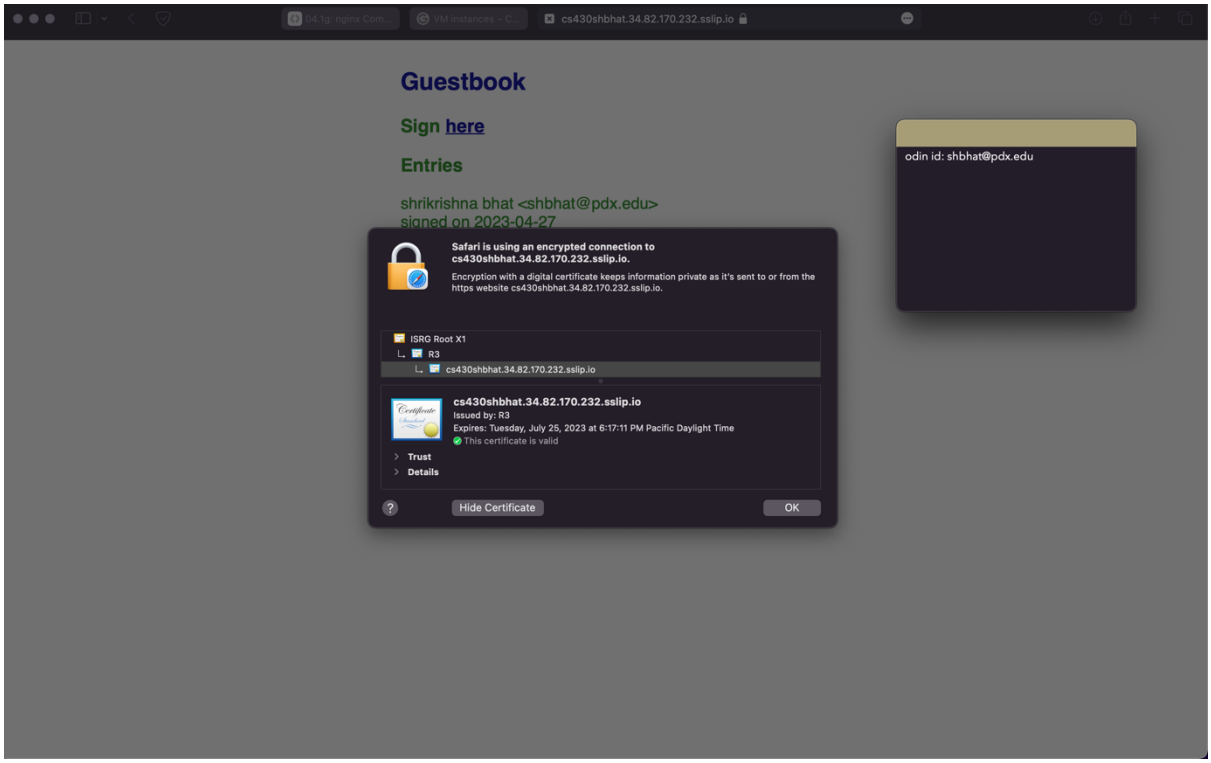
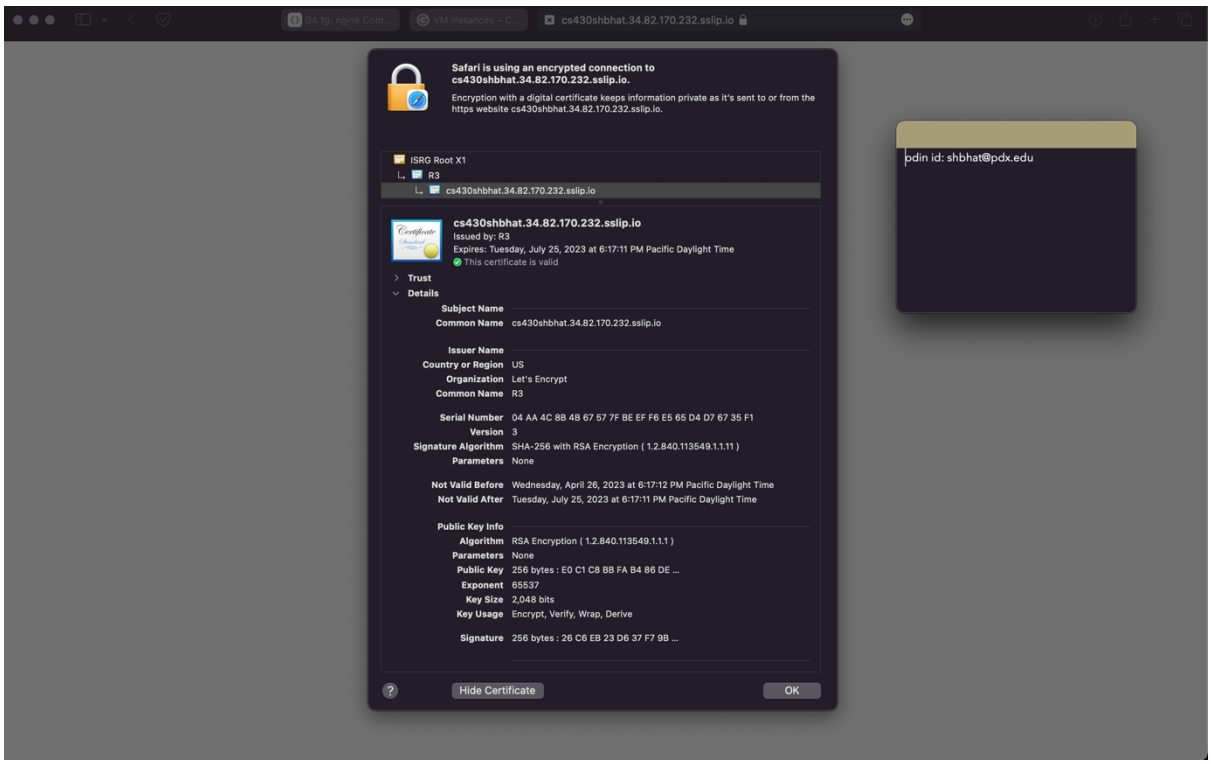
Section #1

1.1 Nginx Compute Engine Guestbook

1.1.1 Take a screenshot of the site along with its Let's Encrypt certificate and include it in your lab notebook




cs430shbhat.34.82.170.232.sslip.io
Guestbook
Sign here
Entries
shrikrishna bhat <shbhat@pdx.edu>
signed on 2023-04-27
odin id: shbhat@pdx.edu
Safari is using an encrypted connection to cs430shbhat.34.82.170.232.sslip.io.
Encryption with a digital certificate keeps information private as it's sent to or from the https website cs430shbhat.34.82.170.232.sslip.io.
ISRG Root X1
R3
cs430shbhat.34.82.170.232.sslip.io
cs430shbhat.34.82.170.232.sslip.io
Issued by: R3
Expires: Tuesday, July 25, 2023 at 6:17:11 PM Pacific Daylight Time
This certificate is valid
Trust
Details
Hide Certificate
OK

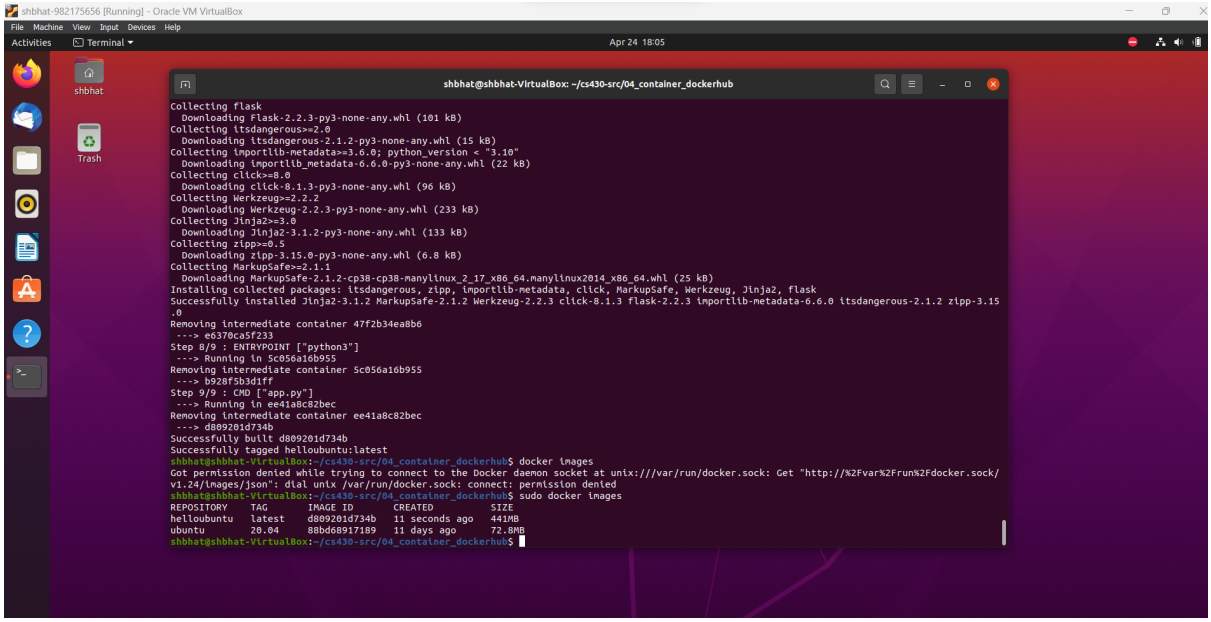

cs430shbhat.34.82.170.232.sslip.io
Safari is using an encrypted connection to cs430shbhat.34.82.170.232.sslip.io.
Encryption with a digital certificate keeps information private as it's sent to or from the https website cs430shbhat.34.82.170.232.sslip.io.
ISRG Root X1
R3
cs430shbhat.34.82.170.232.sslip.io
cs430shbhat.34.82.170.232.sslip.io
Issued by: R3
Expires: Tuesday, July 25, 2023 at 6:17:11 PM Pacific Daylight Time
This certificate is valid
Trust
Details
Subject Name
Common Name cs430shbhat.34.82.170.232.sslip.io
Issuer Name
Country or Region US
Organization Let's Encrypt
Common Name R3
Serial Number 04 AA 4C 8B 4B 67 57 7F BE EF F6 E5 65 D4 D7 67 35 F1
Version 3
Signature Algorithm SHA-256 with RSA Encryption (1.2.840.113549.1.1.11)
Parameters None
Not Valid Before Wednesday, April 26, 2023 at 6:17:12 PM Pacific Daylight Time
Not Valid After Tuesday, July 25, 2023 at 6:17:11 PM Pacific Daylight Time
Public Key Info
Algorithm RSA Encryption (1.2.840.113549.1.1.1)
Parameters None
Public Key 256 bytes : E0 C1 C8 BB FA B4 86 DE ...
Exponent 65537
Key Size 2,048 bits
Key Usage Encrypt, Verify, Wrap, Derive
Signature 256 bytes : 26 C6 EB 23 D6 37 F7 9B ...
Hide Certificate
OK
odin id: shbhat@pdx.edu

Section #2

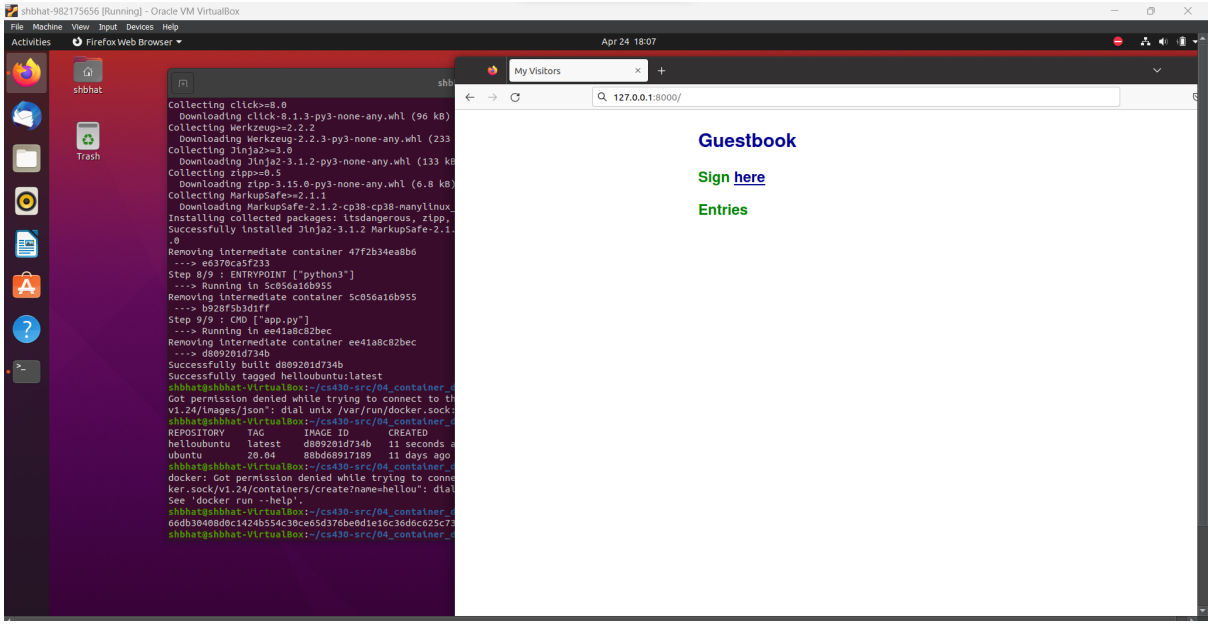
2.1 Docker Guestbook

2.1.1 Take a screenshot of the results for your lab notebook

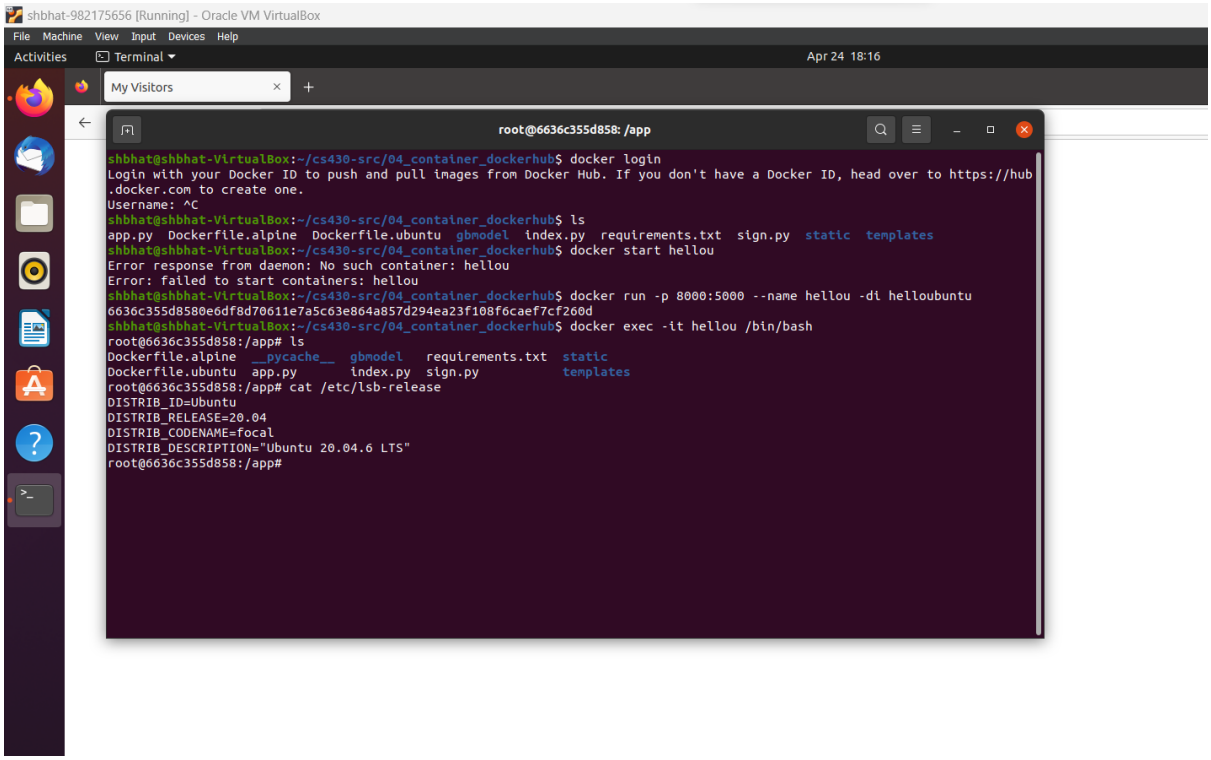
Docker



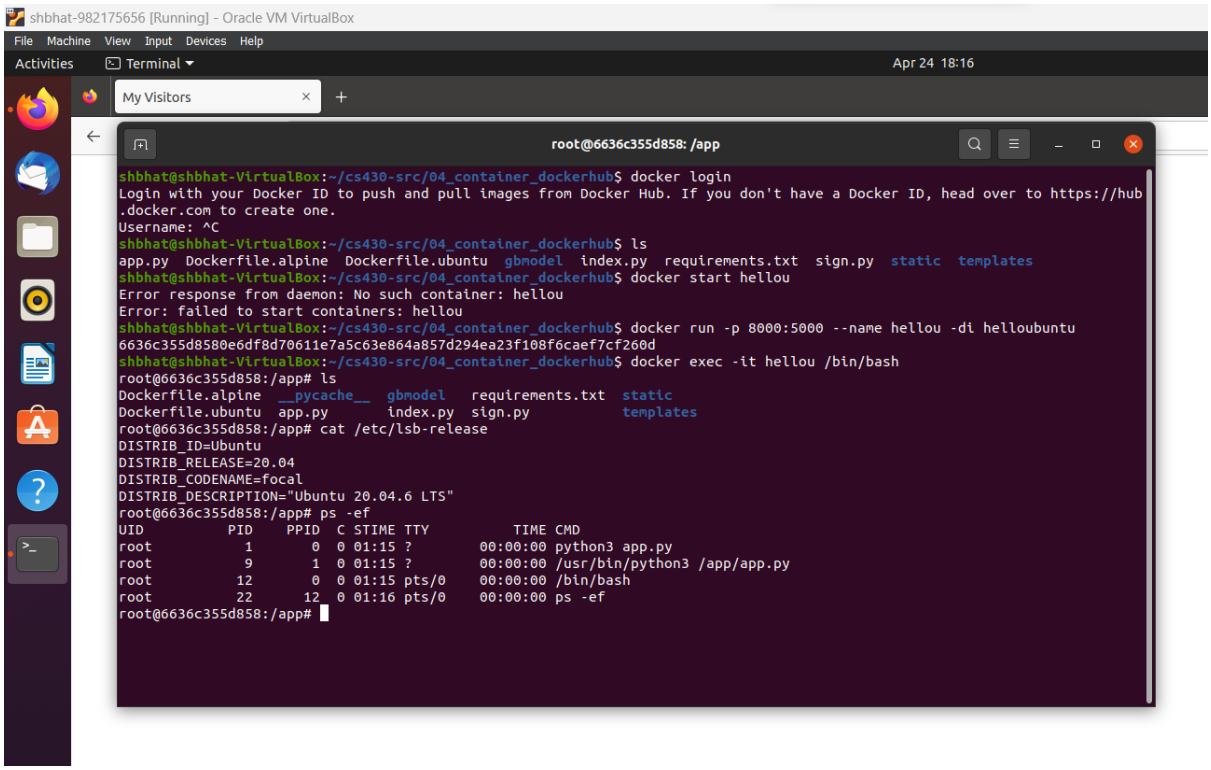
2.1.2 Running the container for testing



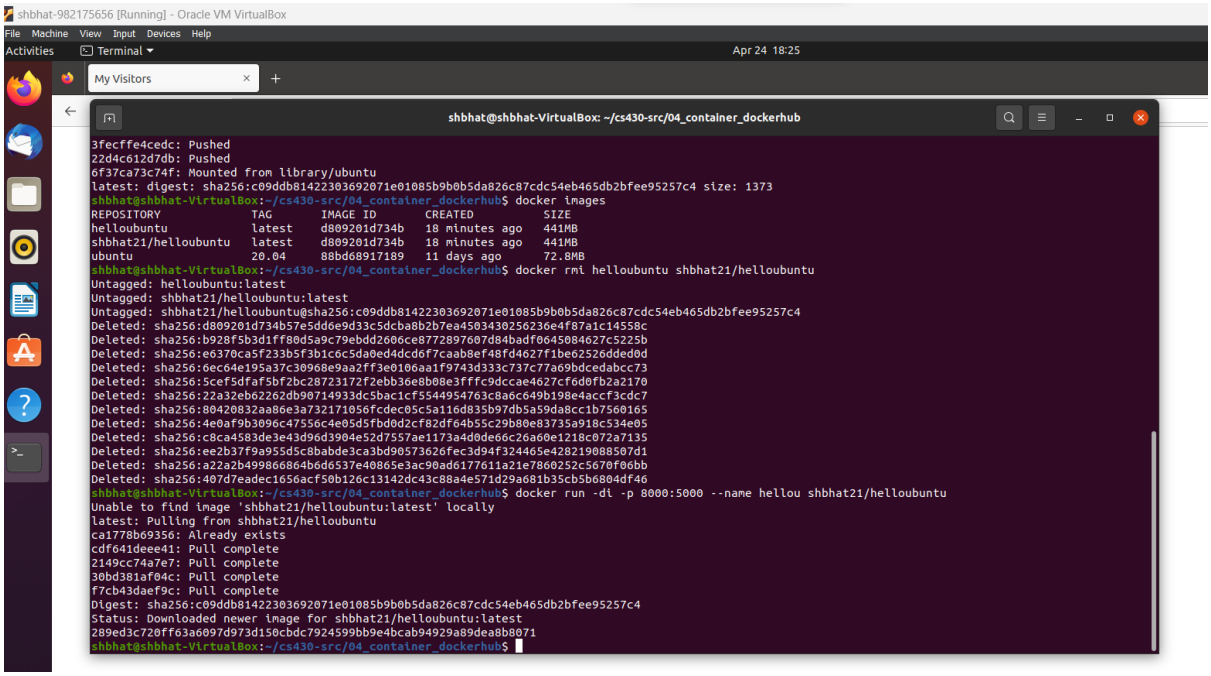
2.1.3 Within the container, show the contents of the current directory via ls, the contents of the file specifying the Linux standard base being used (/etc/lsb-release),

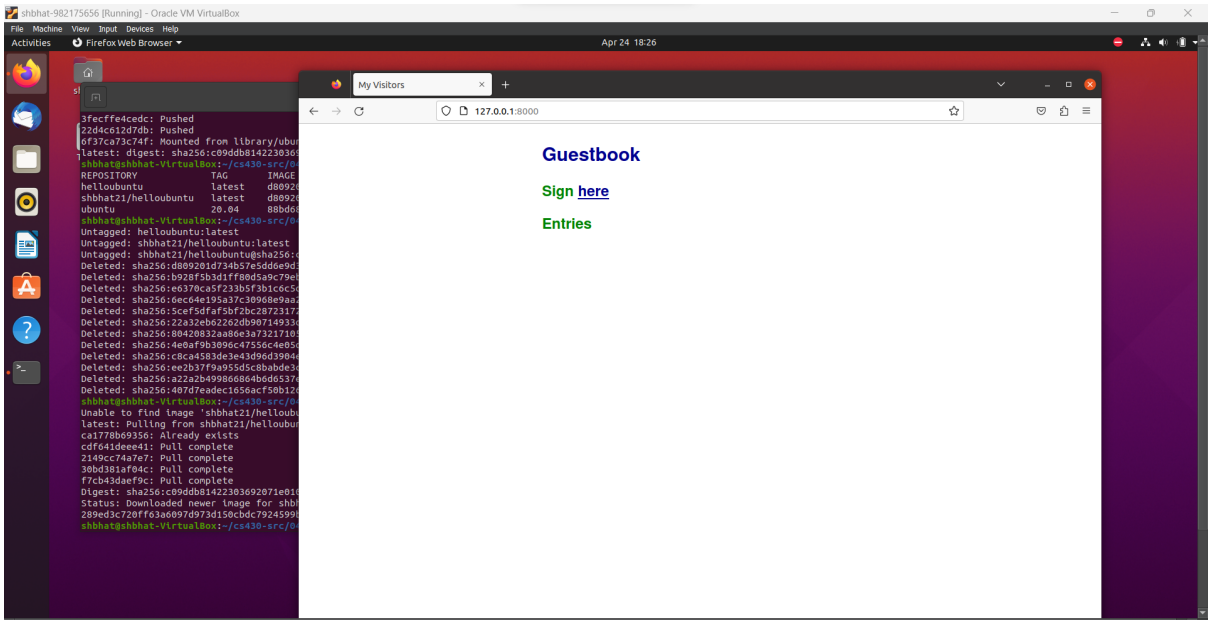


2.1.4 Output of the process listing command (ps -ef).

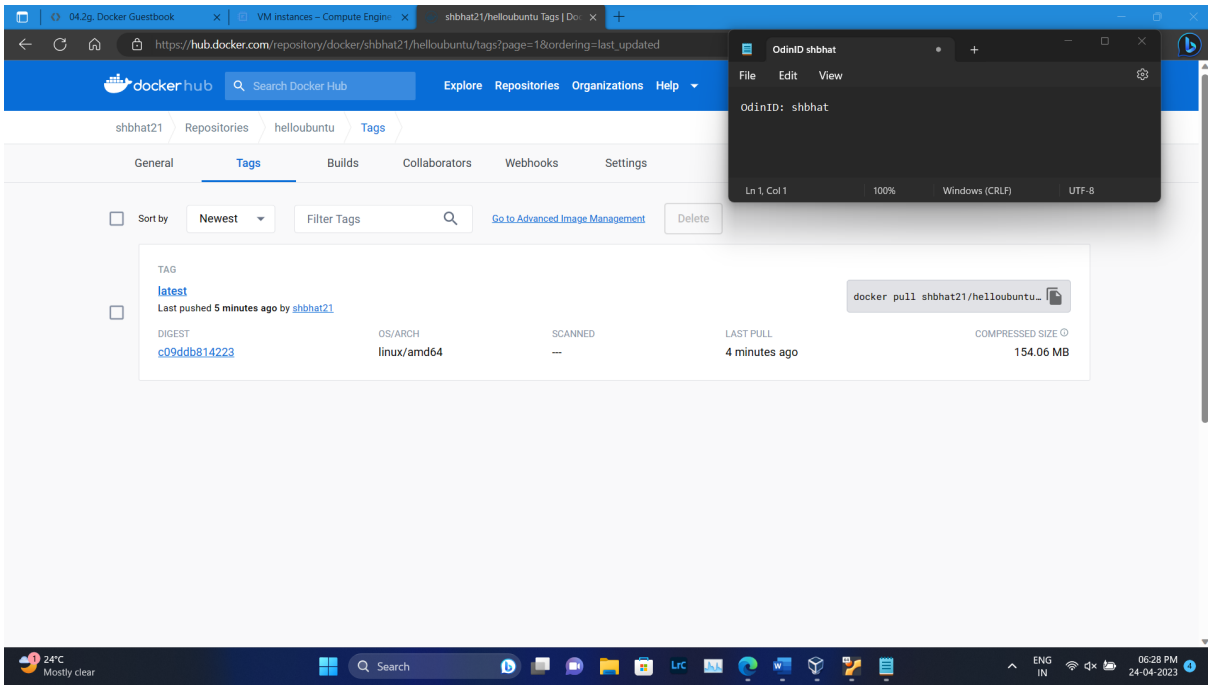


2.1.5 Run the image directly from Docker Hub and show a screenshot of the output of the command in your lab notebook.





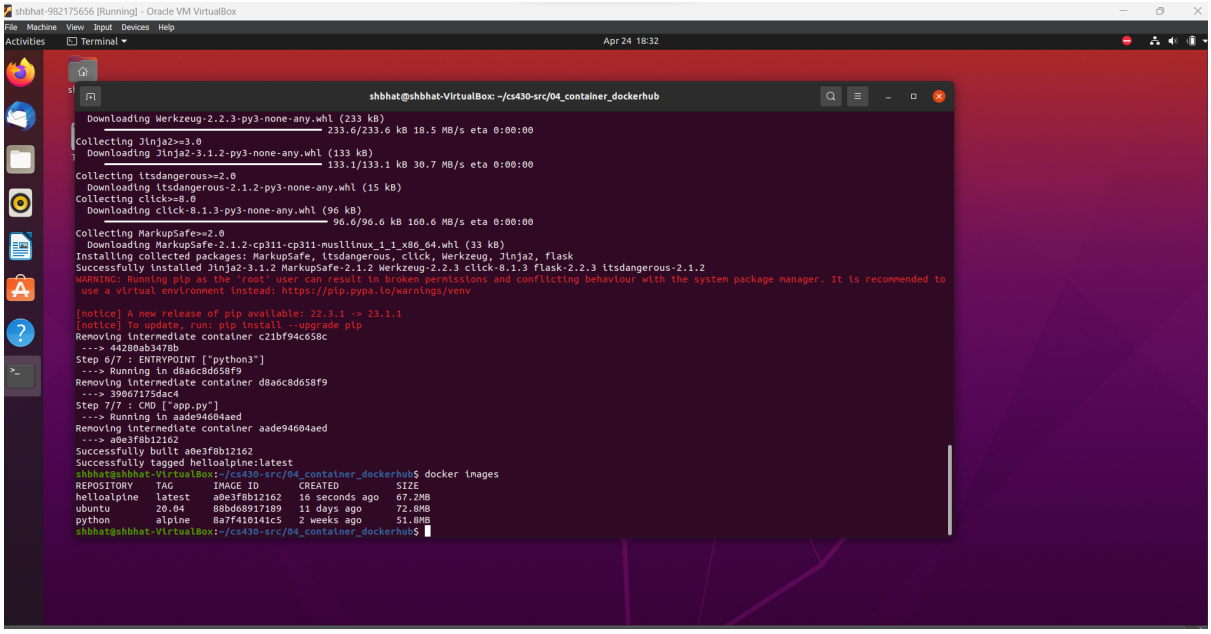
2.1.6 Take a screenshot of the container image and its size for your lab notebook.



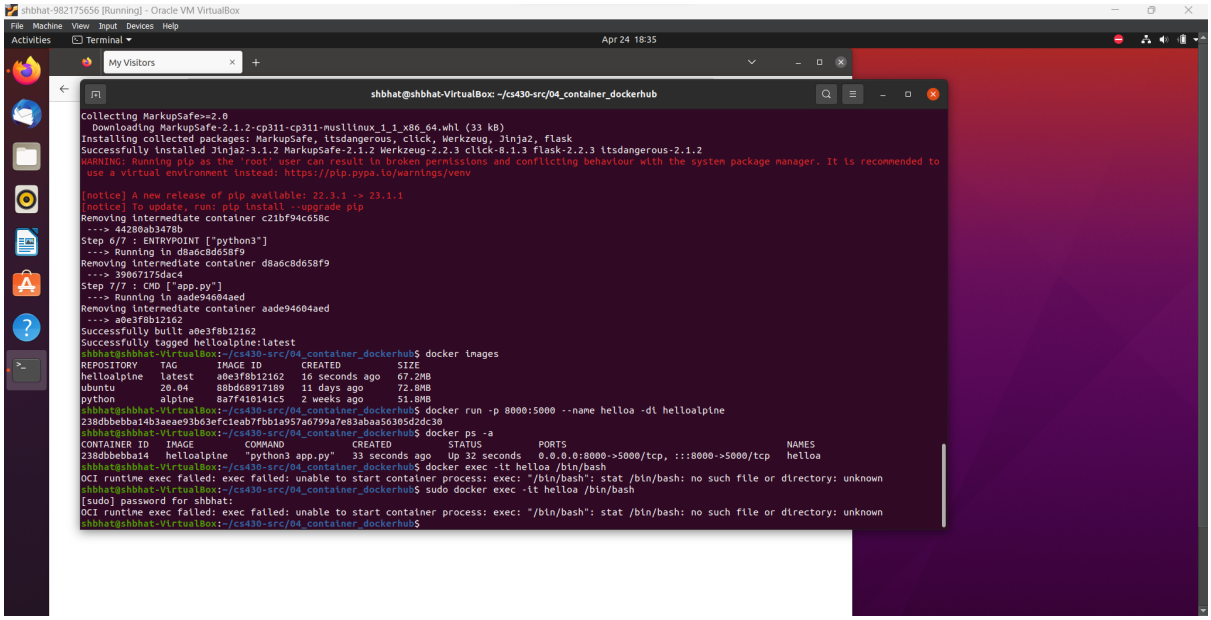
2.1.7 Take a screenshot of the image generated and its size for your lab notebook. How much smaller is the image than the Ubuntu one?

Answer:

Docker alpine is nearly 5 mb smaller than the ubuntu version.



2.1.8 Show the output of this command in a screenshot for your lab notebook. What might have happened?

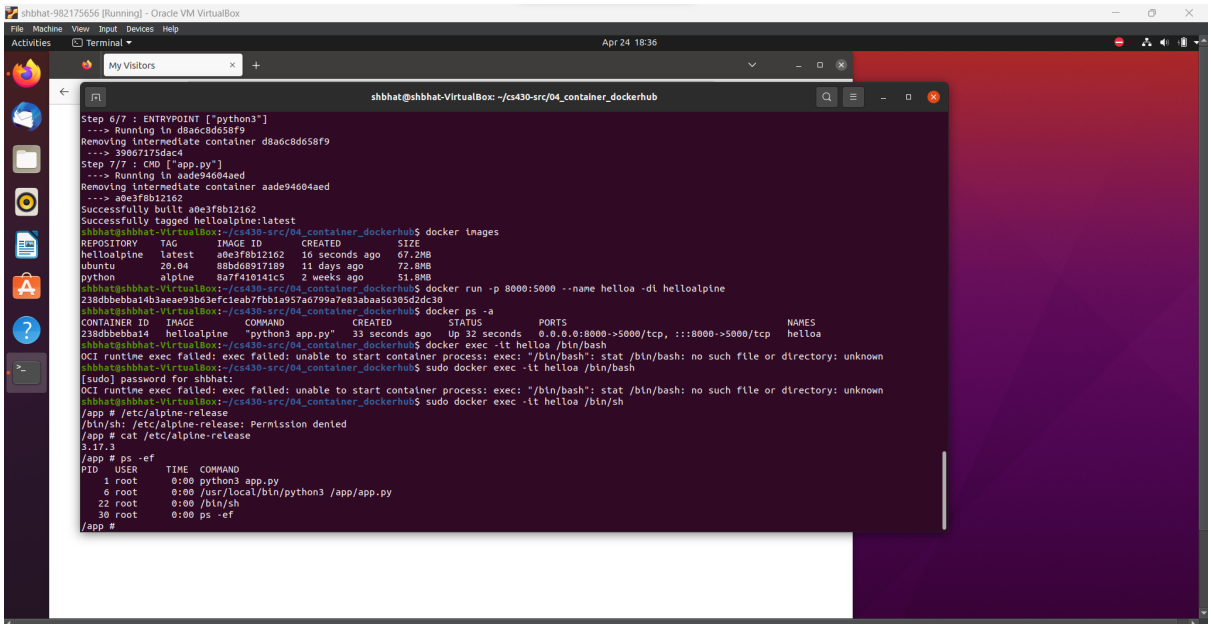


The error message indicates that the container cannot find the /bin/bash executable file. This may be due to the file being deleted or relocated from its original location within the container

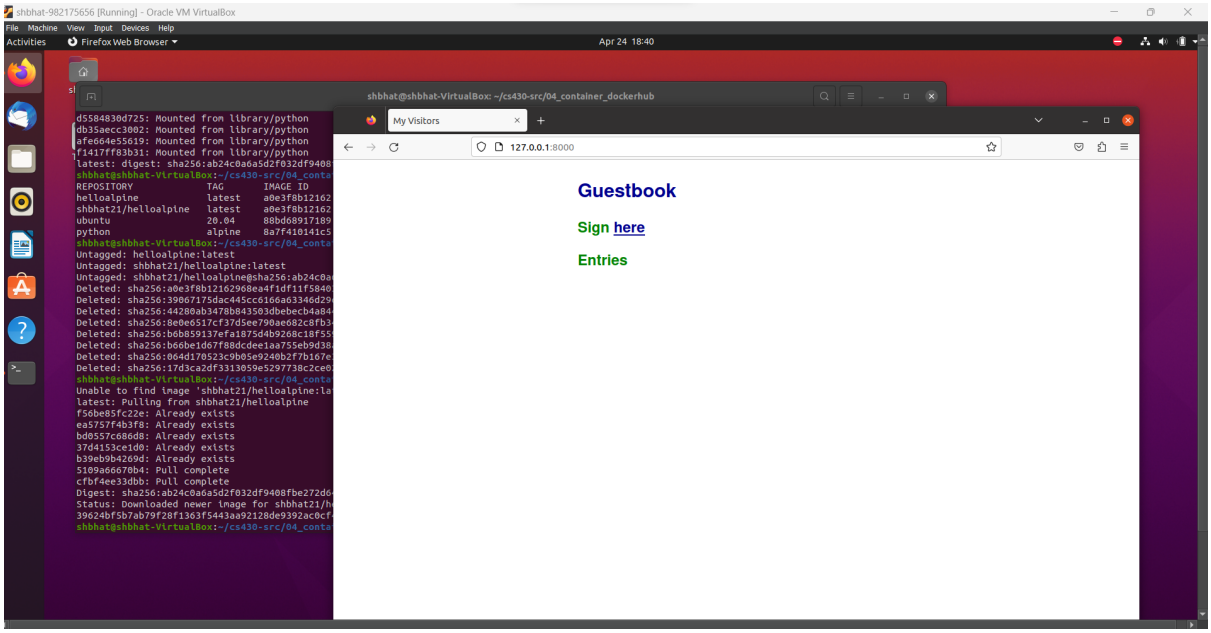
2.1.9 Replace /bin/bash with /bin/sh and repeat the command.

Finally, within the container, examine the file specifying the Alpine release being used (/etc/alpine-release) and perform a process listing command (ps -ef).

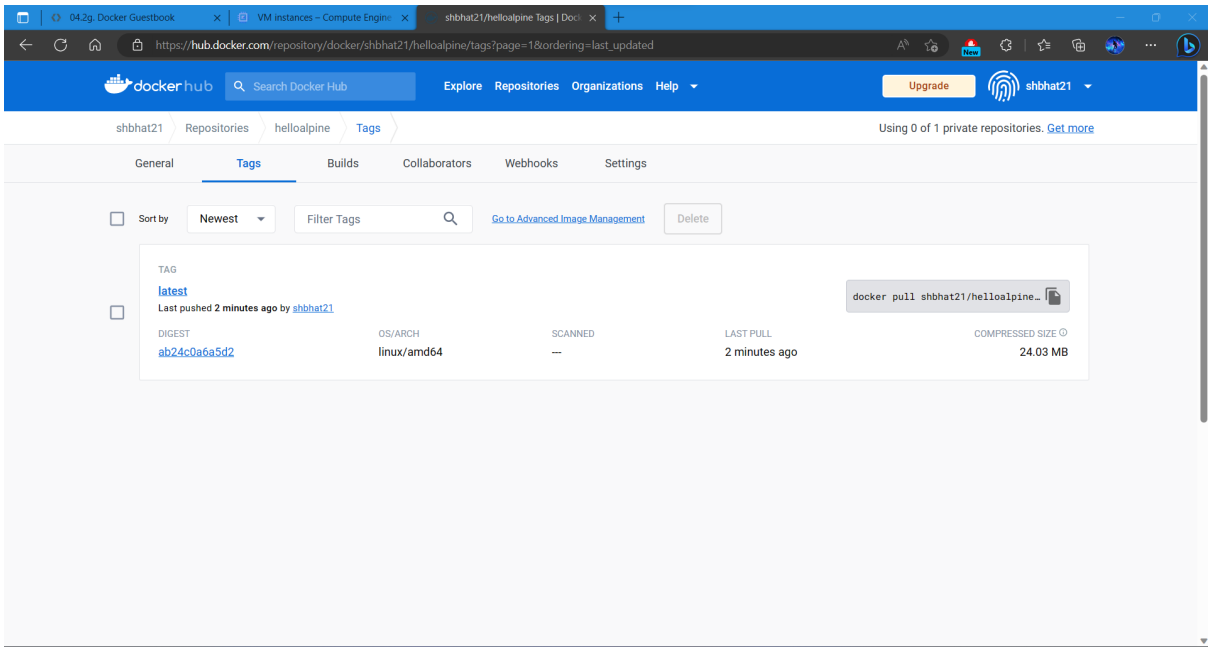
Take a screenshot of the output of each.



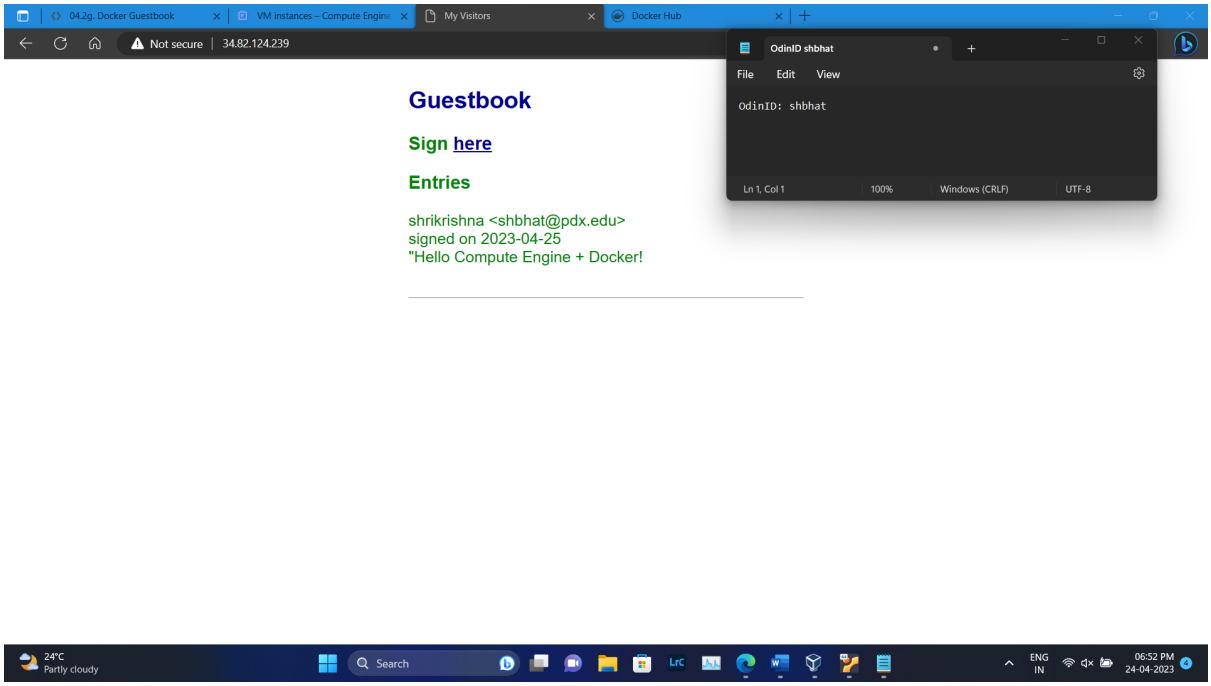
2.1.10 As before, the container is brought up and the local port of 8000 is mapped into the container port of 5000. Test the container by retrieving http://127.0.0.1:8000 using a browser on the VM, wget, or curl.



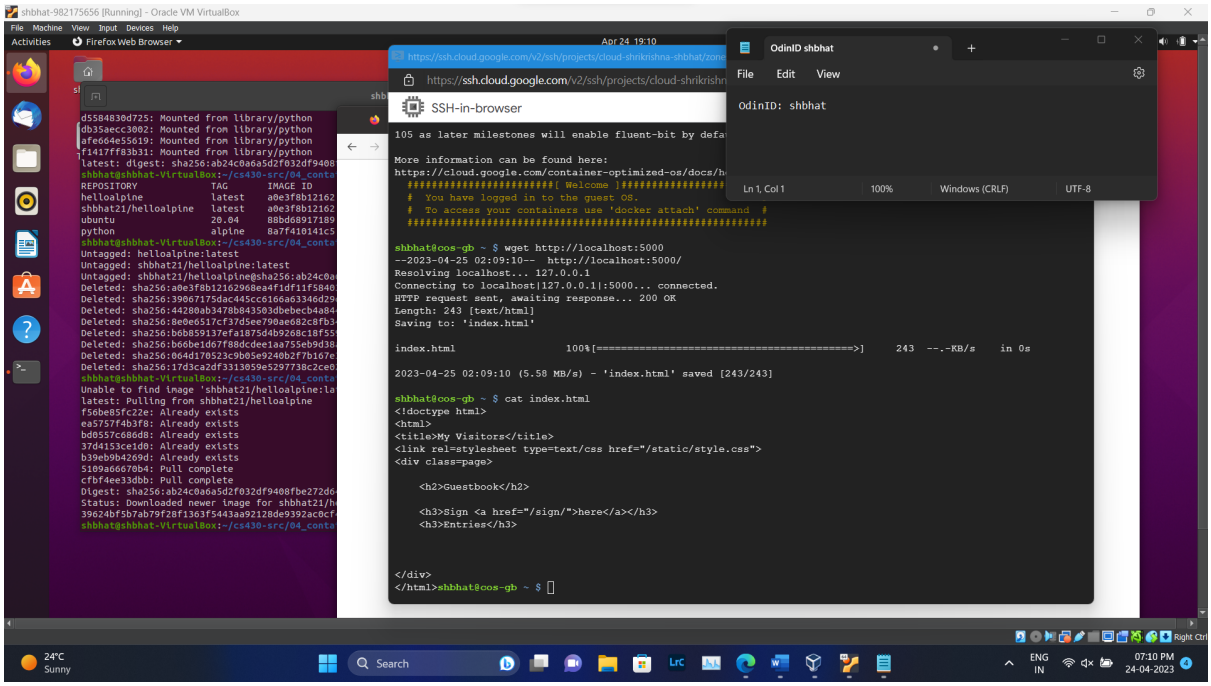
2.1.11 Take a screenshot of the container image and its size.



2.1.12 Take a screenshot of the entry that includes the VM's external IP address for your lab notebook



2.1.13 Perform a local request to the web app (e.g. wget http://localhost:5000) to ensure the container is running.



2.1.14 Take a screenshot of the entry that includes the VM's external IP address for your lab notebook