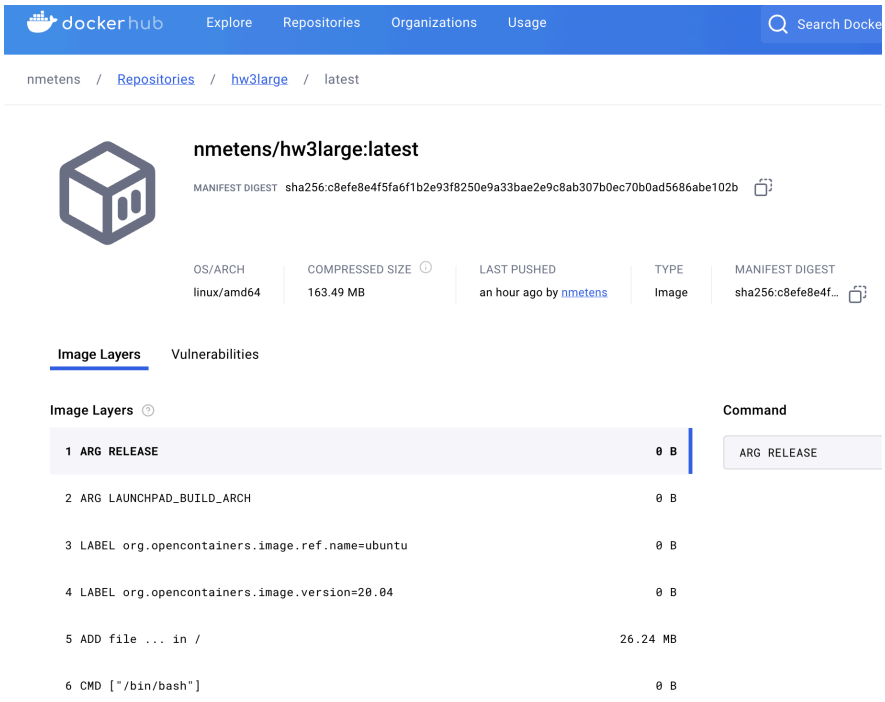
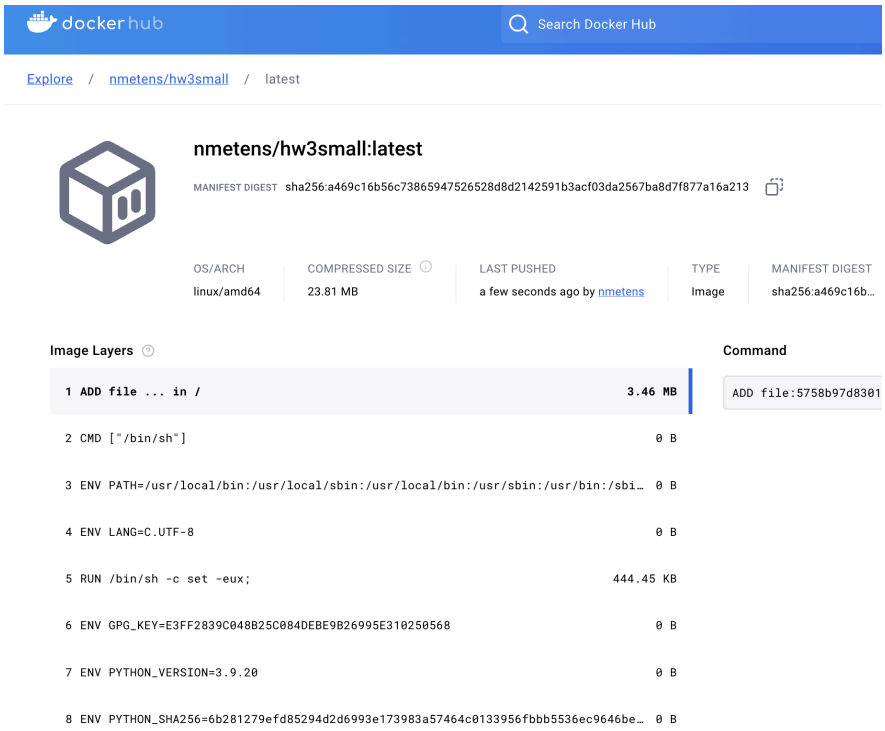
Homework #3

Screenshot of the size of the **nmetens/hw3large** container:



The large container is 163.49 MB in size.

Screenshot of the size of the **nmetens/hw3small** container:



The small container is 23.81 MB, about 7 times smaller than the larger container.

On the course-vm, here is the console showing the container image being pulled for the **hw3larger** container:

```
metens@course-vm:~/hw3$ docker login
Authenticating with existing credentials...
WARNING! Your password will be stored unencrypted in /home/metens/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
metens@course-vm:~/hw3$ docker ps -a
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS     NAMES
metens@course-vm:~/hw3$ docker images
REPOSITORY         TAG          IMAGE ID       CREATED       SIZE
nmetens/hw3small   latest       47d2dd4bb071   3 hours ago   64.3MB
python             3.9-alpine   564015dfd5c3   11 days ago   48.9MB
metens@course-vm:~/hw3$ docker run -p 8000:5001 nmetens/hw3large
Unable to find image 'nmetens/hw3large:latest' locally
latest: Pulling from nmetens/hw3large
d9802f032d67: Pull complete
ae2884491459: Pull complete
4a91f9e7fb48: Pull complete
d326daa54c72: Pull complete
61bbd600c8bd: Pull complete
b0e6638388ed: Pull complete
Digest: sha256:c8efe8e4f5fa6f1b2e93f8250e9a33bae2e9c8ab307b0ec70b0ad5686abe102b
Status: Downloaded newer image for nmetens/hw3large:latest
 * Serving Flask app 'app'
 * Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on all addresses (0.0.0.0)
 * Running on http://127.0.0.1:5001
 * Running on http://172.17.0.2:5001
Press CTRL+C to quit
 * Restarting with stat
 * Debugger is active!
 * Debugger PIN: 121-677-089
172.17.0.1 - - [30/Oct/2024 00:02:59] "GET / HTTP/1.1" 200 -
172.17.0.1 - - [30/Oct/2024 00:03:21] "GET / HTTP/1.1" 200 -
```

Here is the landing page when using the `wget http://localhost:8000` in another window:

```
metens@course-vm:~/hw3$ docker ps -a
CONTAINER ID   IMAGE              COMMAND            CREATED         STATUS         PORTS                                       NAMES
c74c571b2b40   nmetens/hw3large   "python3 app.py"   8 minutes ago   Up 8 minutes   0.0.0.0:8000->5001/tcp, :::8000->5001/tcp   dazzling_chatterjee
metens@course-vm:~/hw3$ wget http://localhost:8000
--2024-10-30 00:09:34--  http://localhost:8000/
Resolving localhost (localhost)... 127.0.0.1
Connecting to localhost (localhost)|127.0.0.1|:8000... connected.
HTTP request sent, awaiting response... 200 OK
Length: 659 [text/html]
Saving to: 'index.html'

index.html                          100%[=============================================================================================>]     659  --.-KB/s    in 0s

2024-10-30 00:09:34 (41.2 MB/s) - 'index.html' saved [659/659]
```

Here is the container image being pulled for the **hw3smaller** container:

```
metens@course-vm:~$ docker images
REPOSITORY   TAG       IMAGE ID   CREATED   SIZE
metens@course-vm:~$ docker run -p 8000:5000 nmetens/hw3small
Unable to find image 'nmetens/hw3small:latest' locally
latest: Pulling from nmetens/hw3small
43c4264eed91: Pull complete
bfd90d6bdb4a: Pull complete
7742e8b512b0: Pull complete
3bc14f086441: Pull complete
a565114772e4: Pull complete
50771f705a7e: Pull complete
933016e57146: Pull complete
46b8934a4bdf: Pull complete
Digest: sha256:a469c16b56c73865947526528d8d2142591b3acf03da2567ba8d7f877a16a213
Status: Downloaded newer image for nmetens/hw3small:latest
 * Serving Flask app 'app'
 * Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on all addresses (0.0.0.0)
 * Running on http://127.0.0.1:5001
 * Running on http://172.17.0.2:5001
Press CTRL+C to quit
 * Restarting with stat
 * Debugger is active!
 * Debugger PIN: 438-695-347
```

Using `wget http://localhost:8000` on the **hw3smaller** container: