## AI TRENDS Lab Exercise – 2

**Name**: ADVAIT GURUNATH CHAVAN

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CDAC – NOIDA PGDAI

## Topic:DOCKER

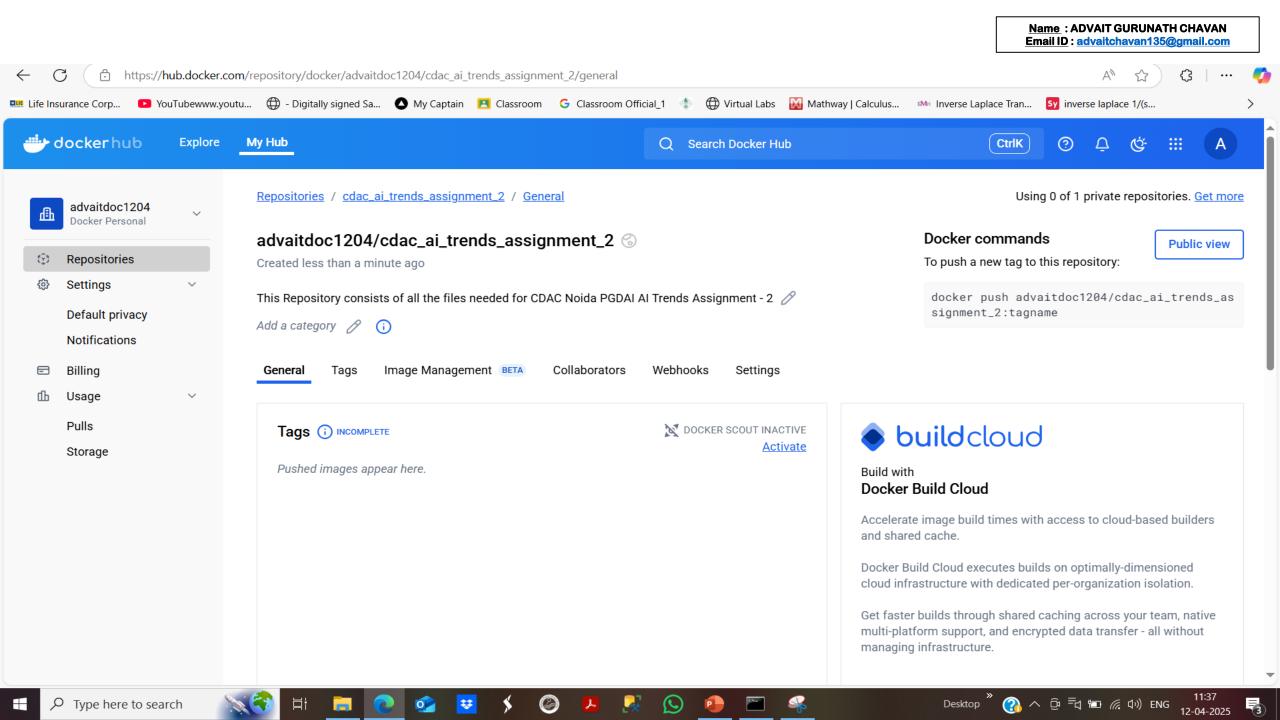
## **SUBMIT via SCREENSHOTS**

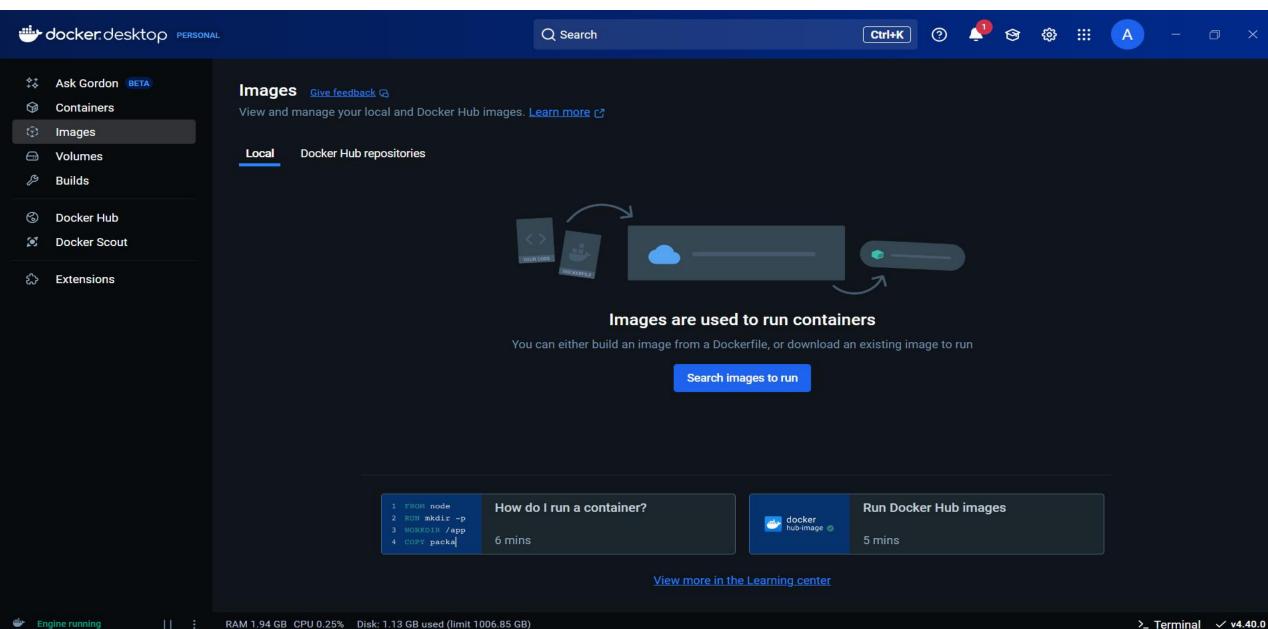
- 1. Create your image with dockerfile.
- 2. Build and deploy your application in the Docker.
- 3. Push your image into Docker hub as public repository.
- 4. Run the commands on Docker terminal
  - \$ docker pull
  - \$ docker images
  - \$ docker build
  - \$ docker run
  - \$ docker commit
  - \$ docker ps
  - \$ docker stop
  - \$ docker rm
  - \$ docker rmi

 $\underline{\textbf{Name}}: \textbf{ADVAIT}\,\textbf{GURUNATH}\,\textbf{CHAVAN}$ 

Email ID: advaitchavan135@gmail.com

C:\Users\Advait\Desktop\CDAC\ASSIGNMENTS -- SOLUTIONS\MODULE 3 -- AI TRENDS\ASSIGNMENT\_2>docker --version Docker version 28.0.4, build b8034c0











































Name: ADVAIT GURUNATH CHAVAN

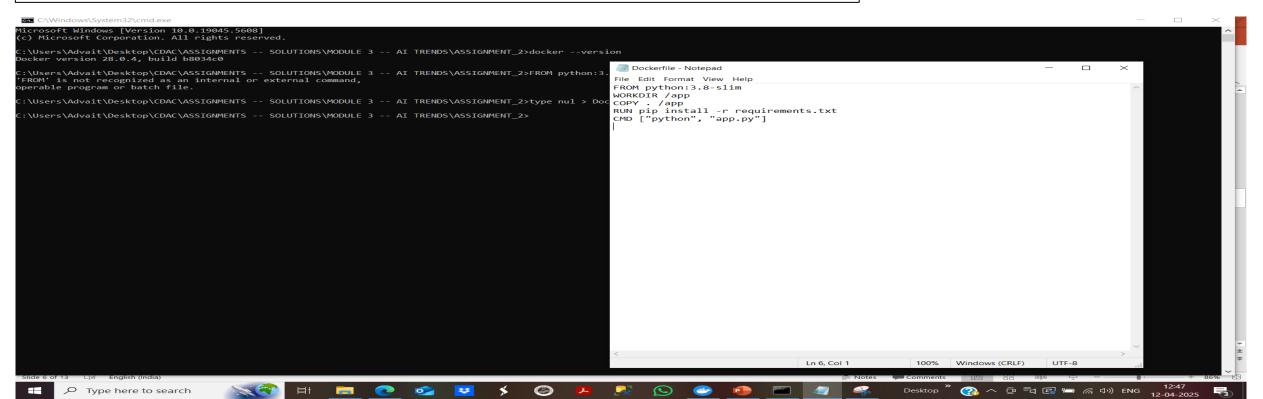
Email ID: advaitchavan135@gmail.com

C:\Windows\System32\cmd.exe Microsoft Windows [Version 10.0.19045.5608] (c) Microsoft Corporation. All rights reserved. C:\Users\Advait\Desktop\CDAC\ASSIGNMENTS -- SOLUTIONS\MODULE 3 -- AI TRENDS\ASSIGNMENT\_2>docker --version Docker version 28.0.4, build b8034c0 app.py - Notepad C:\Users\Advait\Desktop\CDAC\ASSIGNMENTS -- SOLUTIONS\MODULE 3 -- AI TRENDS\ASSIGNMENT\_2> File Edit Format View Help from flask import Flask app = Flask(\_\_name\_\_) @app.route("/") def hello(): return "Hello, world! Welcome to my first program hosted on Docker" name == " main ": if app.run(host="0.0.0.0", port=5000, debug=True) Ln 10, Col 3 Windows (CRLF) UTF-8

Email ID: advaitchavan135@gmail.com

## C:\Users\Advait\Desktop\CDAC\ASSIGNMENTS -- SOLUTIONS\MODULE 3 -- AI TRENDS\ASSIGNMENT\_2>type nul > Dockerfile

Name	Date modified	Туре	Size
AI TRENDS _ LAB EXERCISE _ 2.pptx	12-04-2025 12:47	Microsoft PowerPo	779 KB
🔒 app.py	12-04-2025 12:42	Python File	1 KB
Dockerfile	12-04-2025 12:47	File	1 KB
requirements.txt	12-04-2025 12:41	Text Document	1 KB



```
C:\Users\Advait\Desktop\CDAC\ASSIGNMENTS -- SOLUTIONS\MODULE 3 -- AI TRENDS\ASSIGNMENT_2>docker build -t ai_trends_assignment_2 .
[+] Building 64.5s (10/10) FINISHED
                                                                                                                                                                                             docker:desktop-linux
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 149B
                                                                                                                                                                                                             0.05
=> [internal] load metadata for docker.io/library/python:3.8-slim
=> [auth] library/python:pull token for registry-1.docker.io
=> [internal] load .dockerignore
                                                                                                                                                                                                             0.7s
=> => transferring context: 2B
=> [1/4] FROM docker.io/library/python:3.8-slim@sha256:1d52838af602b4b5a831beb13a0e4d073280665ea7be7f69ce2382f29c5a613f
                                                                                                                                                                                                            21.85
=> resolve docker.io/library/python:3.8-slim@sha256:1d52838af602b4b5a831beb13a0e4d073280665ea7be7f69ce2382f29c5a613f
=> sha256:a3f1dfe736c5f959143f23d75ab522a60be2da902efac236f4fb2a153cc14a5d 14.53MB / 14.53MB
                                                                                                                                                                                                             8.65
=> => sha256:030d7bdc20a63e3d22192b292d006a69fa3333949f536d62865d1bd0506685cc 3.51MB / 3.51MB
                                                                                                                                                                                                             5.5s
=> => sha256:302e3ee498053a7b5332ac79e8efebec16e900289fc1ecd1c754ce8fa047fcab 29.13MB / 29.13MB
=> => sha256:3971691a363796c39467aae4cdce6ef773273fe6bfc67154d01e1b589befb912 248B / 248B
                                                                                                                                                                                                             1.1s
=> extracting sha256:302e3ee498053a7b5332ac79e8efebec16e900289fc1ecd1c754ce8fa047fcab
                                                                                                                                                                                                             1.9s
=> extracting sha256:030d7bdc20a63e3d22192b292d006a69fa3333949f536d62865d1bd0506685cc
                                                                                                                                                                                                             0.65
=> extracting sha256:a3f1dfe736c5f959143f23d75ab522a60be2da902efac236f4fb2a153cc14a5d
                                                                                                                                                                                                             1.0s
=> extracting sha256:3971691a363796c39467aae4cdce6ef773273fe6bfc67154d01e1b589befb912
                                                                                                                                                                                                             0.6s
=> [internal] load build context
=> => transferring context: 984.77kB
=> [2/4] WORKDIR /app
                                                                                                                                                                                                             6.5s
=> [3/4] COPY . /app
=> [4/4] RUN pip install -r requirements.txt
                                                                                                                                                                                                            11.7s
=> exporting to image
                                                                                                                                                                                                             9.4s
=> => exporting layers
=> => exporting manifest sha256:2b9bde72e03d0cf95347be30873c2e7b28166ca8bdec45d2f66fd48b71570e68
                                                                                                                                                                                                             0.5s
=> exporting config sha256:09a8e2d2cd220550c9f3ea7e38162adf29e2a98dd6c11b392e2366f21498488d
                                                                                                                                                                                                             0.6s
=> exporting attestation manifest sha256:64427a8275beac8b5305b89d4b94a977f70abb93404cad7919c97eee1d64348e
                                                                                                                                                                                                             0.65
=> => exporting manifest list sha256:d6a226b8bca639b29120409839857d18b160d75d06854d8ddcc70d3f3a6242fa
=> => naming to docker.io/library/ai_trends_assignment_2:latest
                                                                                                                                                                                                             0.1s
=> => unpacking to docker.io/library/ai trends assignment 2:latest
                                                                                                                                                                                                             1.6s
```

C:\Users\Advait\Desktop\CDAC\ASSIGNMENTS -- SOLUTIONS\MODULE 3 -- AI TRENDS\ASSIGNMENT\_2>docker run -d -p 5000:5000 ai\_trends\_assignment\_2 885c7dc8b9b4532de72ea430b982011196e682c1b33fe375ae4f3d3cdecfee89

C:\Users\Advait\Desktop\CDAC\ASSIGNMENTS -- SOLUTIONS\MODULE 3 -- AI TRENDS\ASSIGNMENT 2>

docker.desktop PERSONAL Q Search Ask Gordon BETA Images Give feedback □ Containers View and manage your local and Docker Hub images. Learn more **Images** Local Docker Hub repositories Volumes **Builds** 156.51 MB / 0 Bytes in use 1 images Last refresh: 29 minutes ago **Docker Hub Docker Scout** Q Search Extensions Tag Name Image ID Created Size Actions 2 minutes ago 209.06 MB ai\_trends\_assignment\_2 d6a226b8bca6 latest Showing 1 item Walkthroughs How do I run a container? **Run Docker Hub images** 2 RUN mkdir -p docker 6 mins 5 mins 4 COPY packa View more in the Learning center Engine running RAM 0.89 GB CPU 0.00% Disk: 1.34 GB used (limit 1006.85 GB) 

Type here to search



































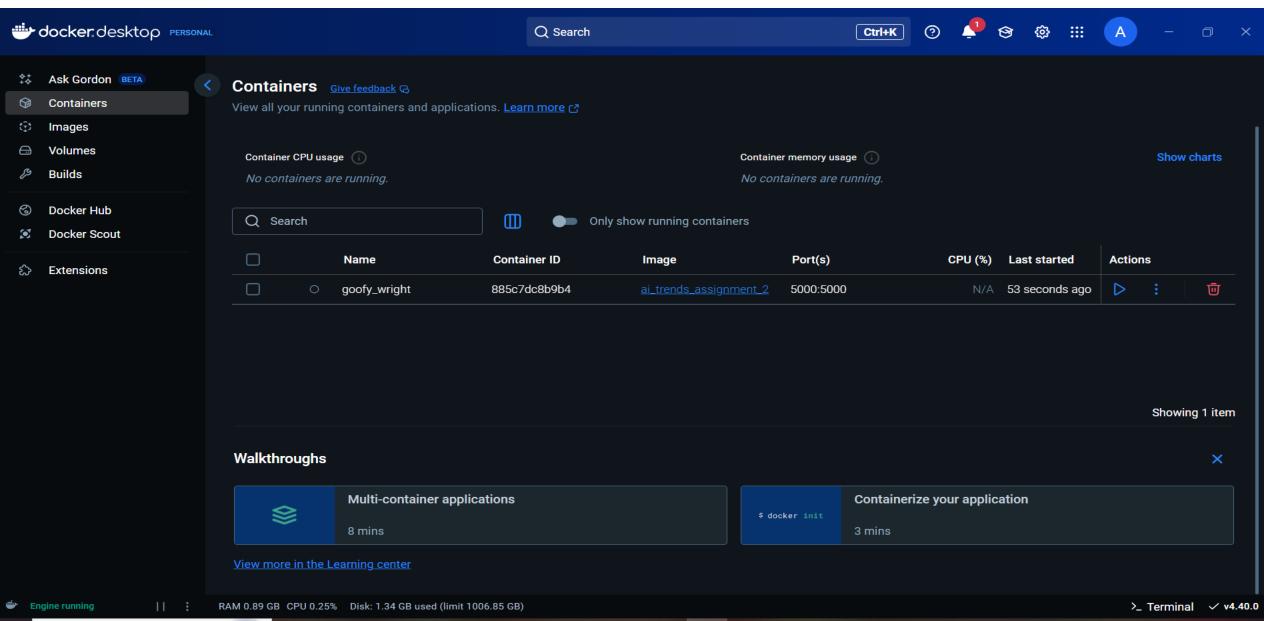








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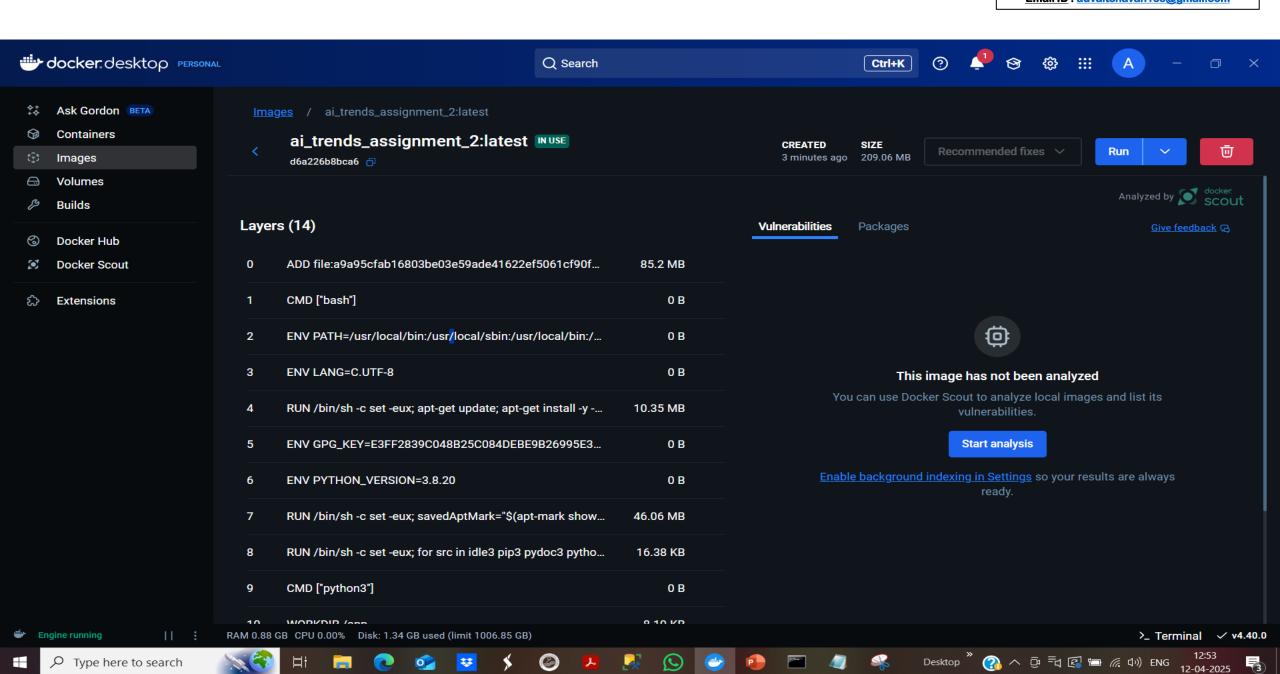




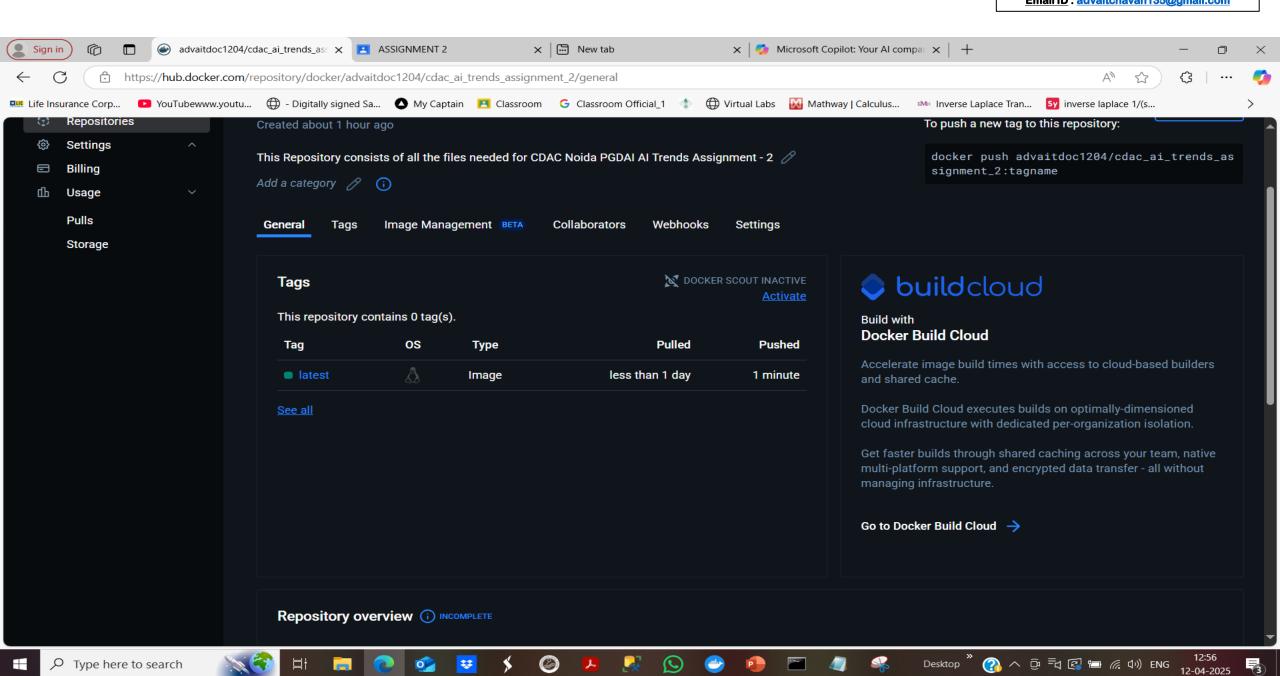








```
C:\Users\Advait\Desktop\CDAC\ASSIGNMENTS -- SOLUTIONS\MODULE 3 -- AI TRENDS\ASSIGNMENT_2>docker tag ai_trends_assignment_2 advaitdoc1204/cdac_ai_trends_assignment_2
C:\Users\Advait\Desktop\CDAC\ASSIGNMENTS -- SOLUTIONS\MODULE 3 -- AI TRENDS\ASSIGNMENT_2>docker login
Authenticating with existing credentials... [Username: advaitdoc1204]
f I Info 
ightarrow To login with a different account, run 'docker logout' followed by 'docker login'
Login Succeeded
C:\Users\Advait\Desktop\CDAC\ASSIGNMENTS -- SOLUTIONS\MODULE 3 -- AI TRENDS\ASSIGNMENT 2>docker push advaitdoc1204/cdac ai trends assignment 2
Using default tag: latest
The push refers to repository [docker.io/advaitdoc1204/cdac_ai_trends_assignment_2]
aae9b8f8590d: Pushed
a3f1dfe736c5: Pushed
3971691a3637: Pushed
6de323f1db8a: Pushed
8b0dc168f9d5: Pushed
302e3ee49805: Pushed
030d7bdc20a6: Pushed
cc0923977ae9: Pushed
latest: digest: sha256:d6a226b8bca639b29120409839857d18b160d75d06854d8ddcc70d3f3a6242fa size: 856
C:\Users\Advait\Desktop\CDAC\ASSIGNMENTS -- SOLUTIONS\MODULE 3 -- AI TRENDS\ASSIGNMENT 2>
```



(2.57) A (3) = 日 (4) ENG 12-04-2025

Docker Hub × 🕞 New tab X ASSIGNMENT 2 🗙 🥠 Microsoft Copilot: Your Al compar 🗴 🕂 https://hub.docker.com/repository/docker/advaitdoc1204/cdac\_ai\_trends\_assignment\_2/tags/latest/sha256-2b9bde72e03d0cf95347be30873c2e7b28166ca8bdec45d2f66fd48b71570e68 Wirtual Labs Mathway | Calculus... ™ Inverse Laplace Tran... Sy inverse laplace 1/(s... docker hub Q Search Docker Hub advaitdoc1204 Repositories / cdac\_ai\_trends\_assignment\_2 / Tags / latest **Docker Personal** Repositories advaitdoc1204/cdac\_ai\_trends\_assignment\_2:latest Delete Tag Settings INDEX DIGEST sha256:d6a226b8bca639b29120409839857d18b160d75d06854d8ddcc70d3f3a6242fa Billing Usage COMPRESSED SIZE ① LAST PUSHED **TYPE** MANIFEST DIGEST sha256:2b9bde72... Pulls linux/amd64 50.1 MB 1 minute by advaitdoc1204 **Image** Storage **Vulnerabilities** Image Layers Image Layers ? Command 1 ADD file ... in / 27.78 MB ADD file:a9a95cfab16803be03e59ade41622ef5061cf90f2d034304fe4ac1ee9ff30389 2 CMD ["bash"] 0 B 3 ENV PATH=/usr/local/bin:/usr/local/sbin:/usr/local/bin:/usr/sb... 0 B 4 ENV LANG=C.UTF-8 0 B 5 RUN /bin/sh -c set -eux; 3.35 MB

Type here to search

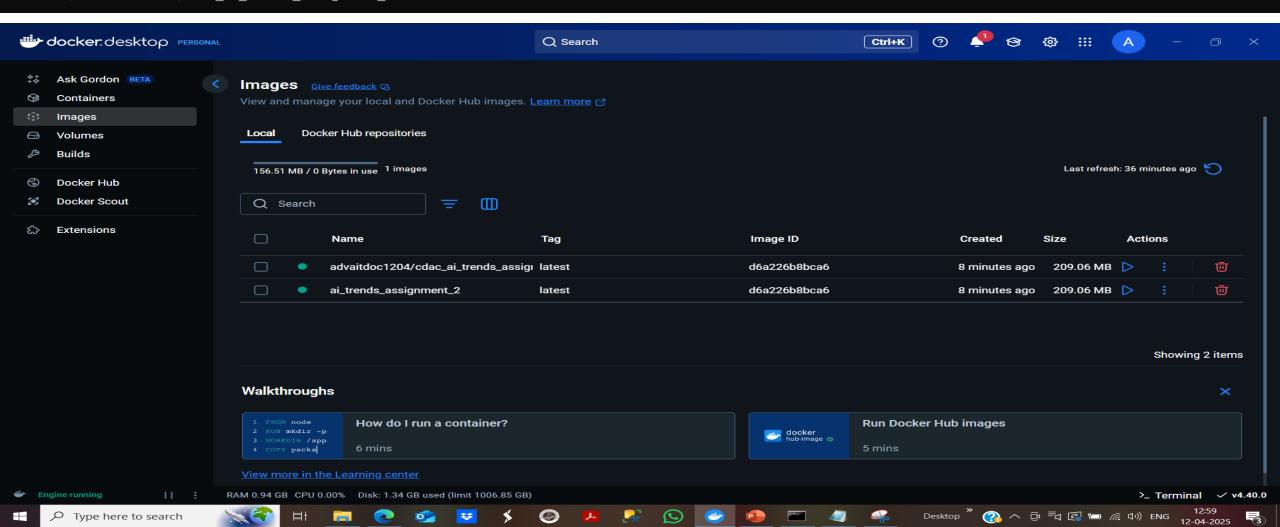
C:\Users\Advait\Desktop\CDAC\ASSIGNMENTS -- SOLUTIONS\MODULE 3 -- AI TRENDS\ASSIGNMENT\_2>docker pull advaitdoc1204/cdac\_ai\_trends\_assignment\_2
Using default tag: latest

latest: Pulling from advaitdoc1204/cdac\_ai\_trends\_assignment\_2

Digest: sha256:d6a226b8bca639b29120409839857d18b160d75d06854d8ddcc70d3f3a6242fa

Status: Image is up to date for advaitdoc1204/cdac\_ai\_trends\_assignment\_2:latest

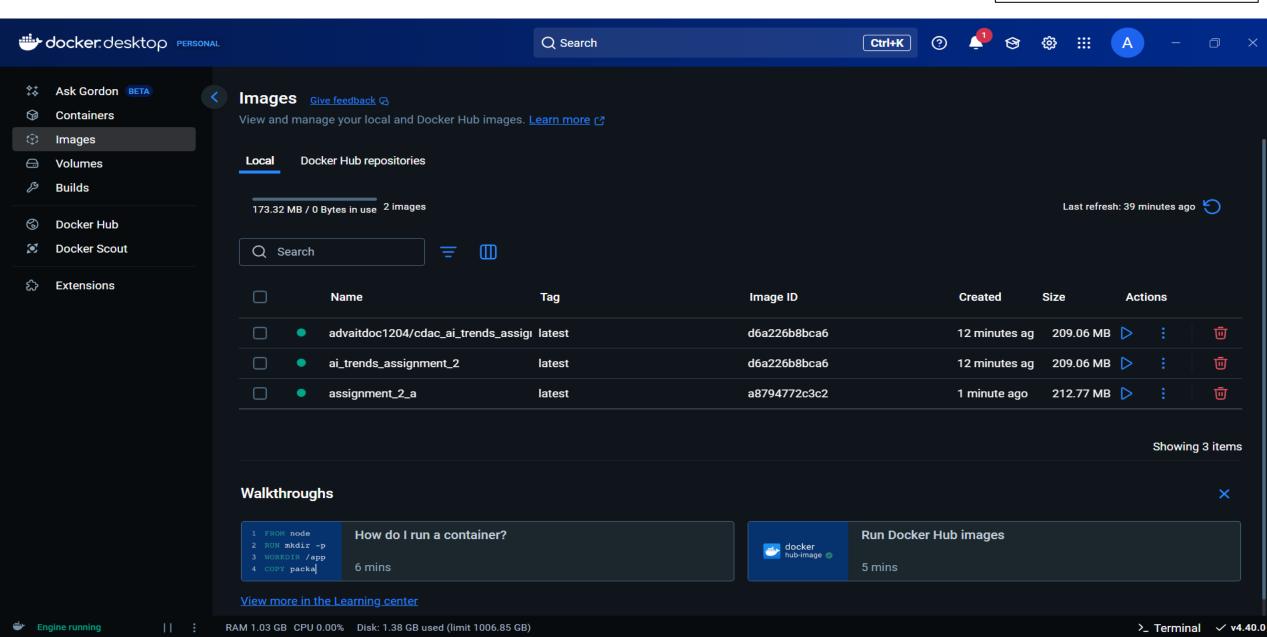
docker.io/advaitdoc1204/cdac\_ai\_trends\_assignment\_2:latest



```
C:\Users\Advait\Desktop\CDAC\ASSIGNMENTS -- SOLUTIONS\MODULE 3 -- AI TRENDS\ASSIGNMENT_2>docker images
REPOSITORY
                                            TAG
                                                      IMAGE ID
                                                                     CREATED
                                                                                     SIZE
advaitdoc1204/cdac ai trends assignment 2
                                            latest
                                                      d6a226b8bca6
                                                                     8 minutes ago
                                                                                     209MB
ai trends assignment 2
                                            latest
                                                      d6a226b8bca6
                                                                     8 minutes ago
                                                                                     209MB
```

```
:\Users\Advait\Desktop\CDAC\ASSIGNMENTS -- SOLUTIONS\MODULE 3 -- AI TRENDS\ASSIGNMENT_2>docker build -t assignment_2 a .
[+] Building 30.5s (10/10) FINISHED
                                                                                                                                                                                              docker:desktop-linux
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 149B
                                                                                                                                                                                                              0.19
=> [internal] load metadata for docker.io/library/python:3.8-slim
=> [auth] library/python:pull token for registry-1.docker.io
                                                                                                                                                                                                              0.05
=> [internal] load .dockerignore
=> => transferring context: 2B
                                                                                                                                                                                                              0.05
=> [1/4] FROM docker.io/library/python:3.8-slim@sha256:1d52838af602b4b5a831beb13a0e4d073280665ea7be7f69ce2382f29c5a613f
                                                                                                                                                                                                              0.49
=> resolve docker.io/library/python:3.8-slim@sha256:1d52838af602b4b5a831beb13a0e4d073280665ea7be7f69ce2382f29c5a613f
=> [internal] load build context
                                                                                                                                                                                                              0.69
=> => transferring context: 2.92MB
=> CACHED [2/4] WORKDIR /app
                                                                                                                                                                                                              0.05
=> [3/4] COPY . /app
=> [4/4] RUN pip install -r requirements.txt
                                                                                                                                                                                                              14.7s
=> exporting to image
                                                                                                                                                                                                              7.4s
=> => exporting layers
=> exporting manifest sha256:c163805f2492fdb507e7eec03393013ac86ffb1073e8f58be3c8b0c9f97e79d3
                                                                                                                                                                                                              0.3s
=> => exporting config sha256:84821c5606d341e78749445b26848dd69977cd939a270361cdb6609790f0e862
                                                                                                                                                                                                              0.7s
=> => exporting attestation manifest sha256:7a6bdc921efb6aee0b704d828f4e45a951c6aaec19aa2488e99c4d0538870727
                                                                                                                                                                                                              0.7s
=> => exporting manifest list sha256:a8794772c3c255d783dc4d03ed148272c492540c0125d7db7b085060d5a84aff
                                                                                                                                                                                                              0.49
=> => naming to docker.io/library/assignment 2 a:latest
=> => unpacking to docker.io/library/assignment 2 a:latest
```

C:\Users\Advait\Desktop\CDAC\ASSIGNMENTS -- SOLUTIONS\MODULE 3 -- AI TRENDS\ASSIGNMENT\_2>docker run -d -p 5000:5000 assignment\_2\_a
4ff6922e46b53e1bbec31fbc917c4b3214052b7cd4753a01f925345aeabbe57a











































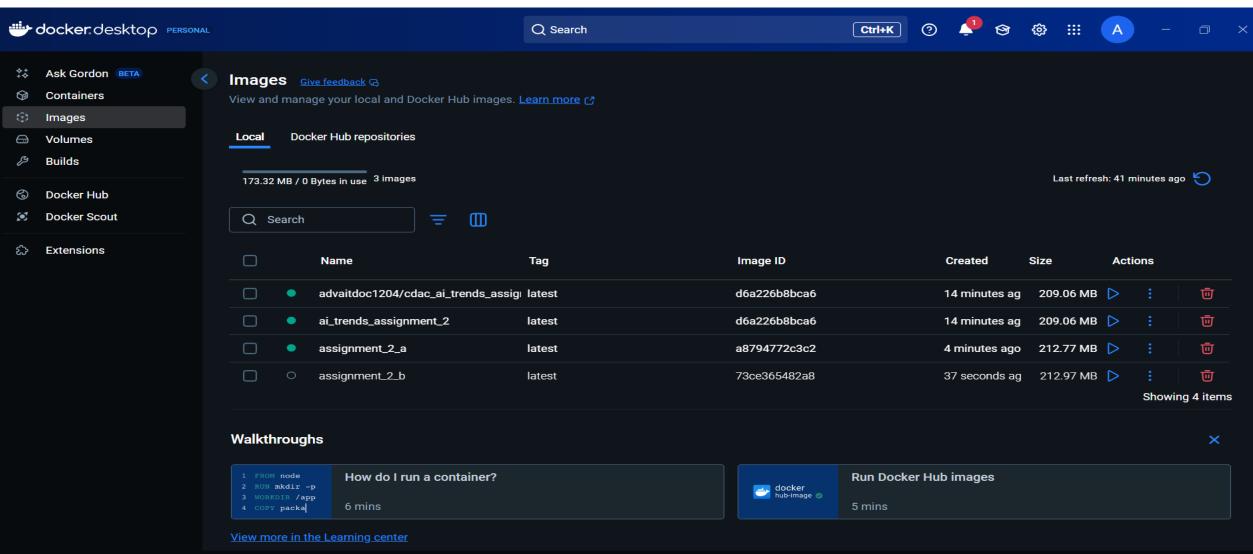








C:\Users\Advait\Desktop\CDAC\ASSIGNMENTS -- SOLUTIONS\MODULE 3 -- AI TRENDS\ASSIGNMENT\_2>docker commit 4ff6922e46b53e1bbec31fbc917c4b3214052b7cd4753a01f925345aeabbe57a assignment\_2\_b sha256:73ce365482a83added683ef454a4a60de1d32a6d3987db9704ba3bc52d8f170c

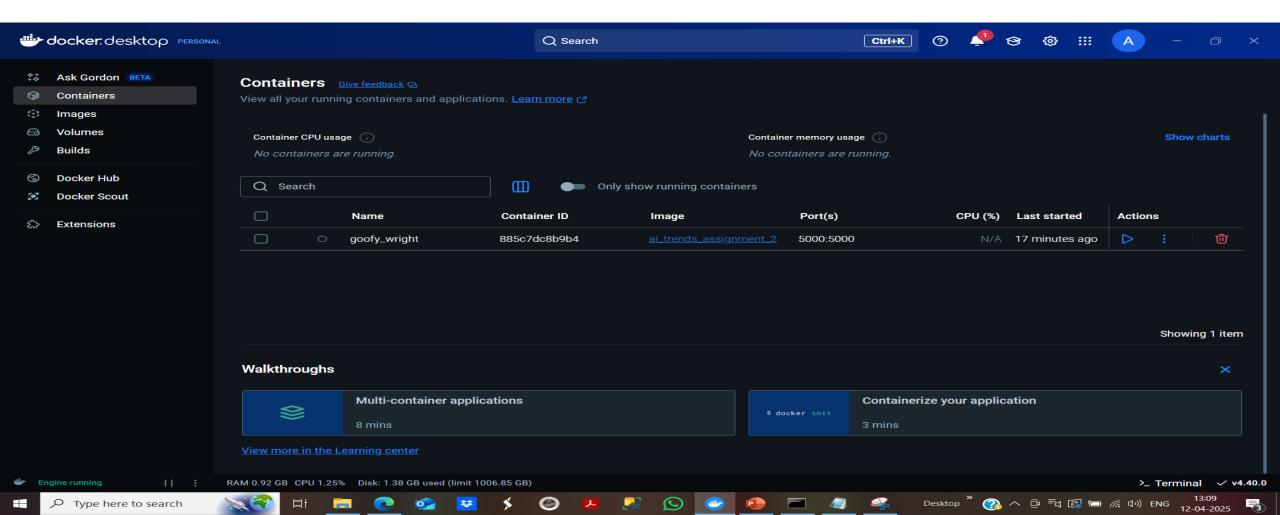


Engine running

C:\Users\Advait\Desktop\CDAC\ASSIGNMENTS -- SOLUTIONS\MODULE 3 -- AI TRENDS\ASSIGNMENT 2>docker ps CONTAINER ID IMAGE COMMAND CREATED STATUS **PORTS** NAMES C:\Users\Advait\Desktop\CDAC\ASSIGNMENTS -- SOLUTIONS\MODULE 3 -- AI TRENDS\ASSIGNMENT\_2>docker ps -a CONTAINER ID IMAGE COMMAND CREATED STATUS **PORTS** NAMES 4ff6922e46b5 assignment 2 a "python app.py" 3 minutes ago Exited (1) 3 minutes ago naughty\_swanson ai trends assignment 2 Exited (1) 13 minutes ago 885c7dc8b9b4 "python app.py" 13 minutes ago goofy wright - docker desktop PERSONAL Ctrl+K Q Search Ask Gordon BETA Containers Give feedback (3) Containers View all your running containers and applications. Learn more **Images** Volumes Container CPU usage Container memory usage Show charts **Builds** No containers are running. No containers are running. Docker Hub  $\square$ Q Search Only show running containers **Docker Scout** Name Port(s) CPU (%) Last started Container ID **Image** Actions Extensions goofy\_wright ai\_trends\_assignment\_2 5000:5000 N/A 14 minutes ago  $\triangleright$ 885c7dc8b9b4 回 naughty\_swanson 4ff6922e46b5 5000:5000 N/A 4 minutes ago  $\triangleright$ assignment\_2\_a

C:\Users\Advait\Desktop\CDAC\ASSIGNMENTS -- SOLUTIONS\MODULE 3 -- AI TRENDS\ASSIGNMENT\_2>docker stop 885c7dc8b9b4532de72ea430b982011196e682c1b33fe375ae4f3d3cdecfee89 885c7dc8b9b4532de72ea430b982011196e682c1b33fe375ae4f3d3cdecfee89

C:\Users\Advait\Desktop\CDAC\ASSIGNMENTS -- SOLUTIONS\MODULE 3 -- AI TRENDS\ASSIGNMENT\_2>docker rm 4ff6922e46b53e1bbec31fbc917c4b3214052b7cd4753a01f925345aeabbe57a



C:\Users\Advait\Desktop\CDAC\ASSIGNMENTS -- SOLUTIONS\MODULE 3 -- AI TRENDS\ASSIGNMENT\_2>docker rmi sha256:73ce365482a83added683ef454a4a60de1d32a6d3987db9704ba3bc52d8f170c

Untagged: assignment 2 b:latest

Deleted: sha256:73ce365482a83added683ef454a4a60de1d32a6d3987db9704ba3bc52d8f170c

