

Docker & Docker Hub

Assignment 1:

Demonstrate minimum 15 basic docker command with explanation and screenshot.

Submission Example

1. Docker images

This command is used to display all the images available in your local machine

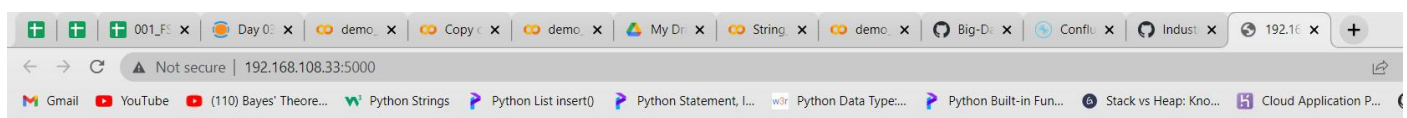
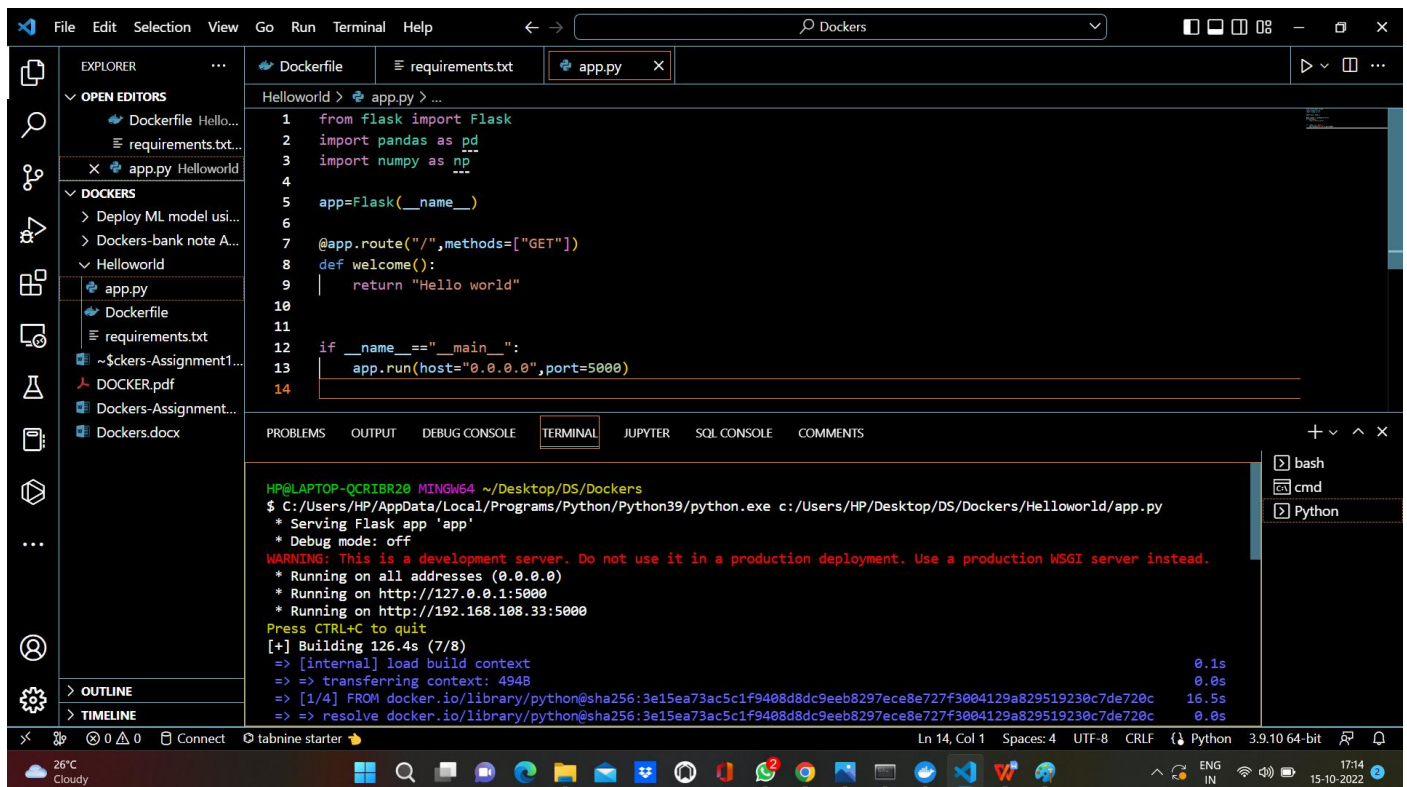
```
C:\Users\HP\Desktop\DS\Dockers>docker images
REPOSITORY          TAG         IMAGE ID      CREATED       SIZE
welcome-app         latest      d346477ff2f2  7 days ago   1.09GB
mahadevkharmate94/welcome-app latest      d346477ff2f2  7 days ago   1.09GB
<none>              <none>     a50d931d7814  7 days ago   1.09GB
<none>              <none>     d2e6e66ecdaa  7 days ago   1.06GB

C:\Users\HP\Desktop\DS\Dockers>
```

Assignment 2:

[Hello World Docker Image](#) Run Hello World Docker Image Locally.

Perfectly Run Hello world Docker Image app Locally.



Assignment 3:

Create a hello world fastapi application. Create a Dockerfile for your fastapi hello world application. Build Docker image using Docker file. Run docker image build in previous step. Push your Docker image to Docker Hub.

- I have Build the Docker Image by command: Docker build -t app.py
- TO Run Docker image: docker run -d --p 8000:8000 app
- TO Push Docker Image: docker push mahadevkharmate94/app

The screenshot displays a development environment with a Dockerfile, a terminal window showing the build process, and a Docker Hub repository page.

Dockerfile:

```
1 from flask import Flask
```

Terminal Output:

```
* Running on http://192.168.108.33:5000
Press CTRL+C to quit
[+] Building 126.4s (7/8)
=> [internal] load build context                                0.1s
=> => transferring context: 494B                                0.0s
=> [1/4] FROM docker.io/library/python@sha256:3e15ea73ac5c1f9408d8dc9eeb8297ece8e727f3004129a829519230c7de720c 16.5s
=> => resolve docker.io/library/python@sha256:3e15ea73ac5c1f9408d8dc9eeb8297ece8e727f3004129a829519230c7de720c 0.0s
=> => sha256:f05c8762fe15f7fc201c1aa6fc62169085158400c64fd5cc0492498b85e1d06 8.53kB / 8.53kB 0.0s
[+] Building 126.6s (7/8)
=> => sha256:3e15ea73ac5c1f9408d8dc9eeb8297ece8e727f3004129a829519230c7de720c 2.36kB / 2.36kB 0.0s
=> => sha256:e9ebb760d74df0c28447c2f67050800c3392a3987ed77ce493545c7d3ad24c9d 2.22kB / 2.22kB 0.0s
=> => sha256:967c89122295127adc8e23053527ebb284ca542cec4dea0cc398e4accd9354ca 20.02MB / 20.02MB 14.6s
=> => sha256:9f28dfdb382574859f82bcf9f7f915420a88010cbc01e803ed613def474a6a4 234B / 234B 2.2s
=> => extracting sha256:967c89122295127adc8e23053527ebb284ca542cec4dea0cc398e4accd9354ca 0.9s
[+] Building 126.9s (7/8)
=> => sha256:3e15ea73ac5c1f9408d8dc9eeb8297ece8e727f3004129a829519230c7de720c 2.36kB / 2.36kB 0.0s
[+] Building 127.0s (7/8)
=> => sha256:967c89122295127adc8e23053527ebb284ca542cec4dea0cc398e4accd9354ca 20.02MB / 20.02MB 14.6s
[+] Building 164.1s (9/9) FINISHED
=> [internal] load build definition from Dockerfile 0.1s
=> => transferring dockerfile: 137B 0.0s
=> [internal] load .dockerignore 0.0s
=> => extracting sha256:967c89122295127adc8e23053527ebb284ca542cec4dea0cc398e4accd9354ca 0.9s
=> => extracting sha256:9f28dfdb382574859f82bcf9f7f915420a88010cbc01e803ed613def474a6a4 0.0s
=> => extracting sha256:5e971b2ac5723bf47eb1753dc126d2e831b33248c5fc2ae09d8e44880c2fe89c 0.2s
=> [2/4] COPY . /app 0.1s
=> [3/4] WORKDIR /app 0.1s
=> [4/4] RUN pip install -r requirements.txt 139.8s
=> => exporting to image 1.4s
=> => exporting layers 1.4s
=> => writing image sha256:d45aca002da48a654a1ea39b16d69d2438c634cd502e0608b2dba1d61430529 0.0s
```

Docker Hub Repository:

Search for great content (e.g., mysql) | Explore | Repositories | Organizations | Help | Upgrade | mahadevkharmate94

mahadevkharmate94 / app.py
Last pushed: a minute ago

mahadevkharmate94 / welcome-app
Last pushed: 7 days ago

Tip: Not finding your repository? Try a different namespace.

Assignment 4:

Automate Assignment below task using github action.

1. Build Docker Image

2. Push Docker Image to Docker hub.