

Experiment 9

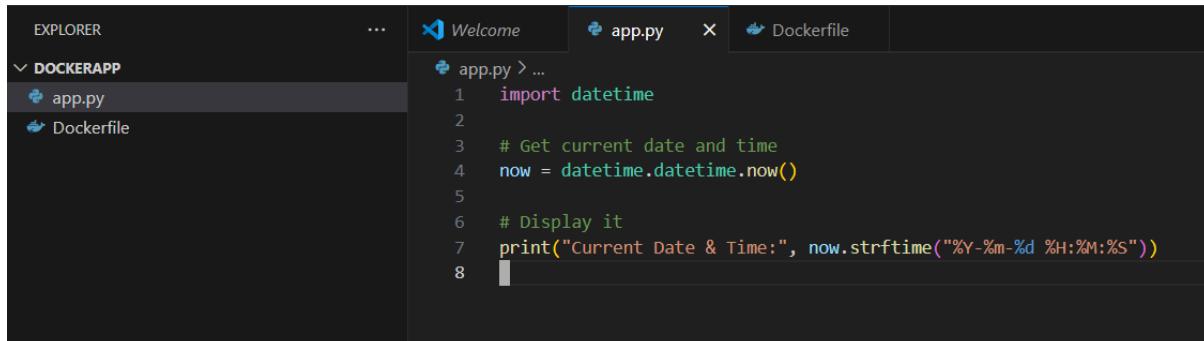
Devops Lab

Chaudhary Tuba
231410
TE IT

Aim: Learn Docker File Instructions, build an image for a sample application using Docker File. Learn Docker File Instructions, build an image for a sample application using Docker File.

Steps:

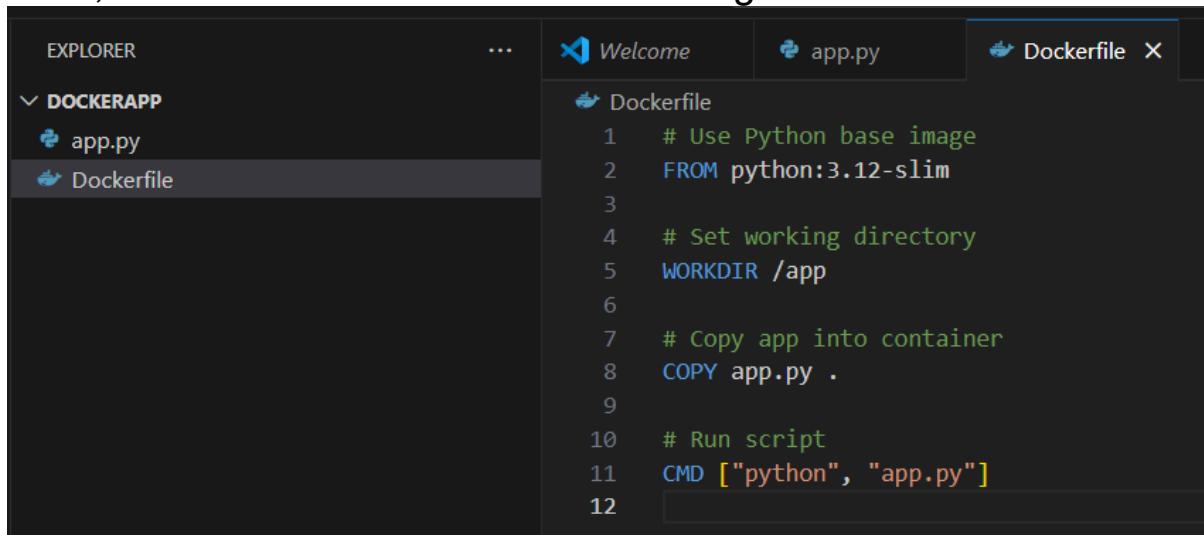
1. Create a simple application file (for example app.py or index.html) that will be deployed inside Docker. This is the base code we want to run.



The screenshot shows a code editor interface with a dark theme. On the left is an Explorer sidebar showing a folder named 'DOCKERAPP' containing 'app.py' and 'Dockerfile'. The main area displays the contents of 'app.py':

```
1 import datetime
2
3 # Get current date and time
4 now = datetime.datetime.now()
5
6 # Display it
7 print("Current Date & Time:", now.strftime("%Y-%m-%d %H:%M:%S"))
```

2. Write a Docker file with necessary instructions like FROM, COPY, RUN, CMD. This file defines how the image will be built.



The screenshot shows a code editor interface with a dark theme. On the left is an Explorer sidebar showing a folder named 'DOCKERAPP' containing 'app.py' and 'Dockerfile'. The main area displays the contents of 'Dockerfile':

```
1 # Use Python base image
2 FROM python:3.12-slim
3
4 # Set working directory
5 WORKDIR /app
6
7 # Copy app into container
8 COPY app.py .
9
10 # Run script
11 CMD ["python", "app.py"]
```

3. Open terminal and Run the command `docker build -t myapp` to build the image.

```
PS C:\Users\chaud\OneDrive\Documents\dockerapp> docker build -t my-docker-app .
>>
[+] Building 14.0s (9/9) FINISHED                                            docker:desktop-linux
=> [internal] load build definition from Dockerfile                      0.0s
=> => transferring dockerfile: 214B                                         0.0s
=> [internal] load metadata for docker.io/library/python:3.12-slim        6.1s
=> [auth] library/python:pull token for registry-1.docker.io               0.0s
=> [internal] load .dockerignore                                         0.0s
=> => transferring context: 2B                                           0.0s
=> [internal] load build context                                         0.0s
=> => transferring context: 196B                                         0.0s
=> [1/3] FROM docker.io/library/python:3.12-slim@sha256:abc799c7ee22b0d66f46c367643088a35e048bbab 7.2s
=> => resolve docker.io/library/python:3.12-slim@sha256:abc799c7ee22b0d66f46c367643088a35e048bbab 0.0s
=> => sha256:debe34beb0c1f52b9f6e7fc26f1f74708de668b6088d586352067e5d881087d8 249B / 249B   0.7s
=> => sha256:48b120ca37b5b627d81d3cb2e63d808078495be97454db590bba47194cb017ee 12.11MB / 12.11MB 2.2s
=> => sha256:ce1261c6d567efa8e3b457673eeeb474a0a8066df6bb95ca9a6a94a31e219dd3 29.77MB / 29.77MB 4.5s
=> => transferring dockerfile: 214B                                         0.0s
=> [internal] load metadata for docker.io/library/python:3.12-slim        6.1s
=> [auth] library/python:pull token for registry-1.docker.io               0.0s
=> [internal] load .dockerignore                                         0.0s
=> => transferring context: 2B                                           0.0s
=> [internal] load build context                                         0.0s
=> => transferring context: 196B                                         0.0s
=> [2/3] FROM docker.io/library/python:3.12-slim@sha256:abc799c7ee22b0d66f46c367643088a35e048bbab 7.2s
```

4. Run a container from the image using **docker run my-docker-app**. This will start the application inside Docker.

```
--> => naming to docker.io/library/my-docker-app:latest
=> => unpacking to docker.io/library/my-docker-app:latest
PS C:\Users\chaud\OneDrive\Documents\dockerapp> docker run my-docker-app
>>
Current Date & Time: 2025-09-26 16:07:37
PS C:\Users\chaud\OneDrive\Documents\dockerapp> █
```

5. verify the image is created successfully by running docker images. You should see your image in the list

	python	latest	2deb0891ec3f	1 month ago	1.6 GB
	python	3.12	1cb6108b64a4	2 months ago	1.59 GB
	my-docker-app	latest	95e69a20d052	6 minutes ago	176.91 MB

6. you can also run the file inside the docker by going to images→my-docker-app and click on run → you can see the output.

