

54. Create a Docker image of simple web application from using HTTP web server at port 5000 in host.

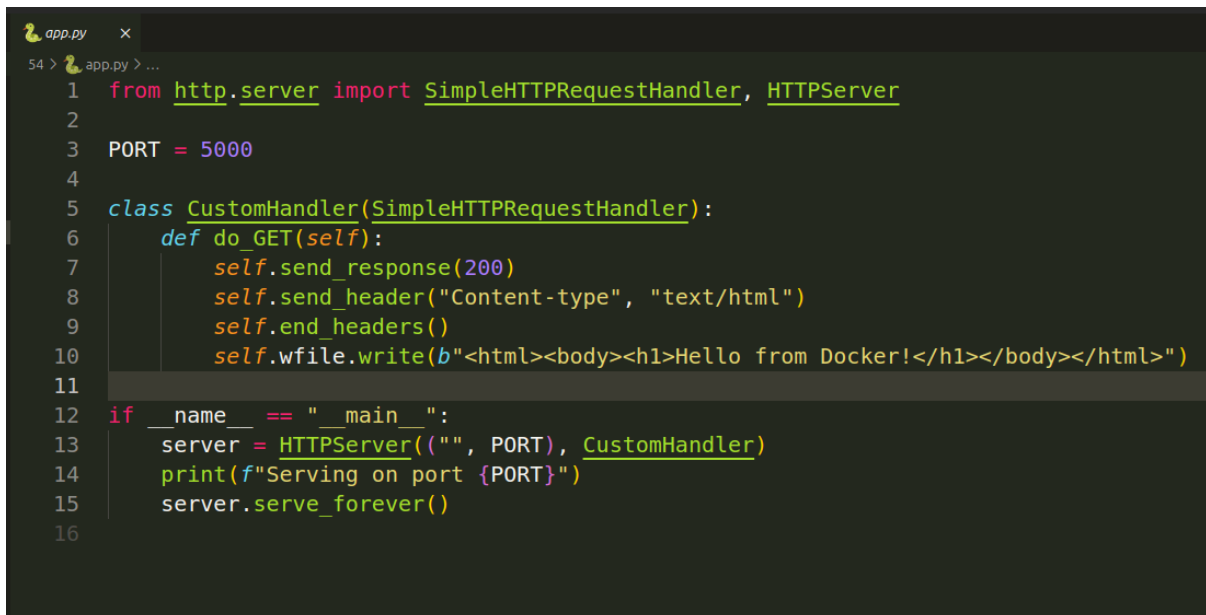
1. Create a new directory for the project:

- mkdir simple-web-app
- cd simple-web-app

2. Create a Python file named app.py for the HTTP server.

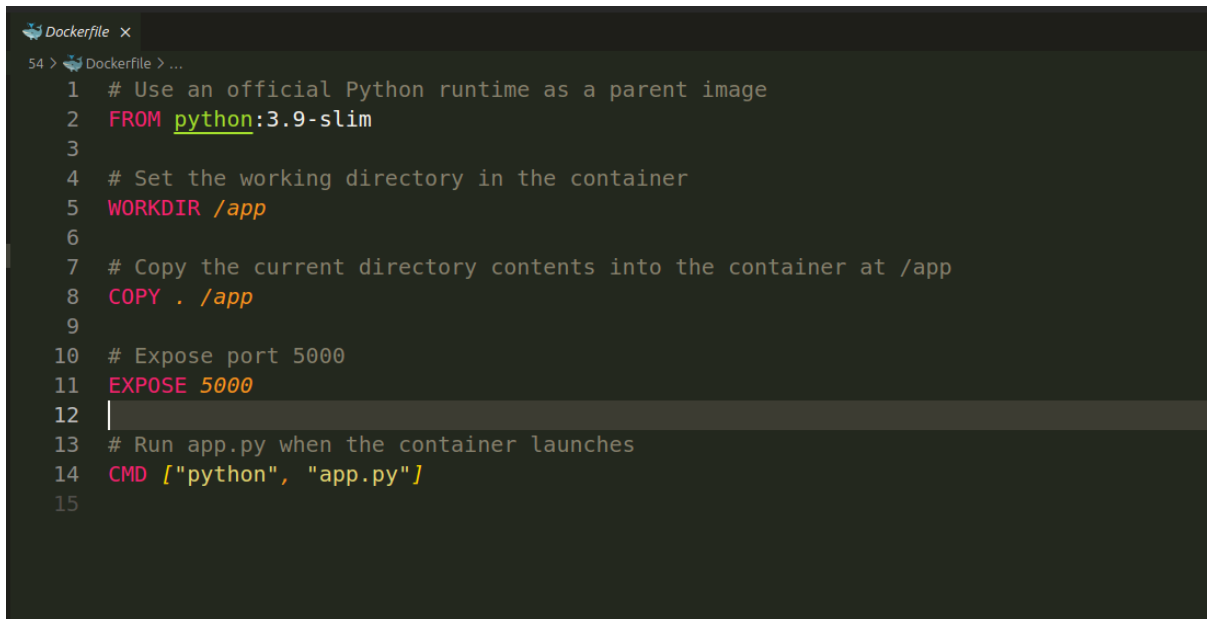
- touch app.py

3. write app.py

A screenshot of a code editor window titled 'app.py'. The editor shows a Python script for a simple HTTP server. The code is as follows:

```
1 from http.server import SimpleHTTPRequestHandler, HTTPServer
2
3 PORT = 5000
4
5 class CustomHandler(SimpleHTTPRequestHandler):
6     def do_GET(self):
7         self.send_response(200)
8         self.send_header("Content-type", "text/html")
9         self.end_headers()
10        self.wfile.write(b"<html><body><h1>Hello from Docker!</h1></body></html>")
11
12 if __name__ == "__main__":
13     server = HTTPServer(("", PORT), CustomHandler)
14     print(f"Serving on port {PORT}")
15     server.serve_forever()
16
```

4. write DockerFile

A screenshot of a code editor showing a Dockerfile. The editor has a dark theme. The Dockerfile content is as follows:

```
Dockerfile x
54 > Dockerfile > ...
1 # Use an official Python runtime as a parent image
2 FROM python:3.9-slim
3
4 # Set the working directory in the container
5 WORKDIR /app
6
7 # Copy the current directory contents into the container at /app
8 COPY . /app
9
10 # Expose port 5000
11 EXPOSE 5000
12
13 # Run app.py when the container launches
14 CMD ["python", "app.py"]
15
```

Run both command

-docker build -t simple-web-app .

-docker run -p 5000:5000 simple-web-app