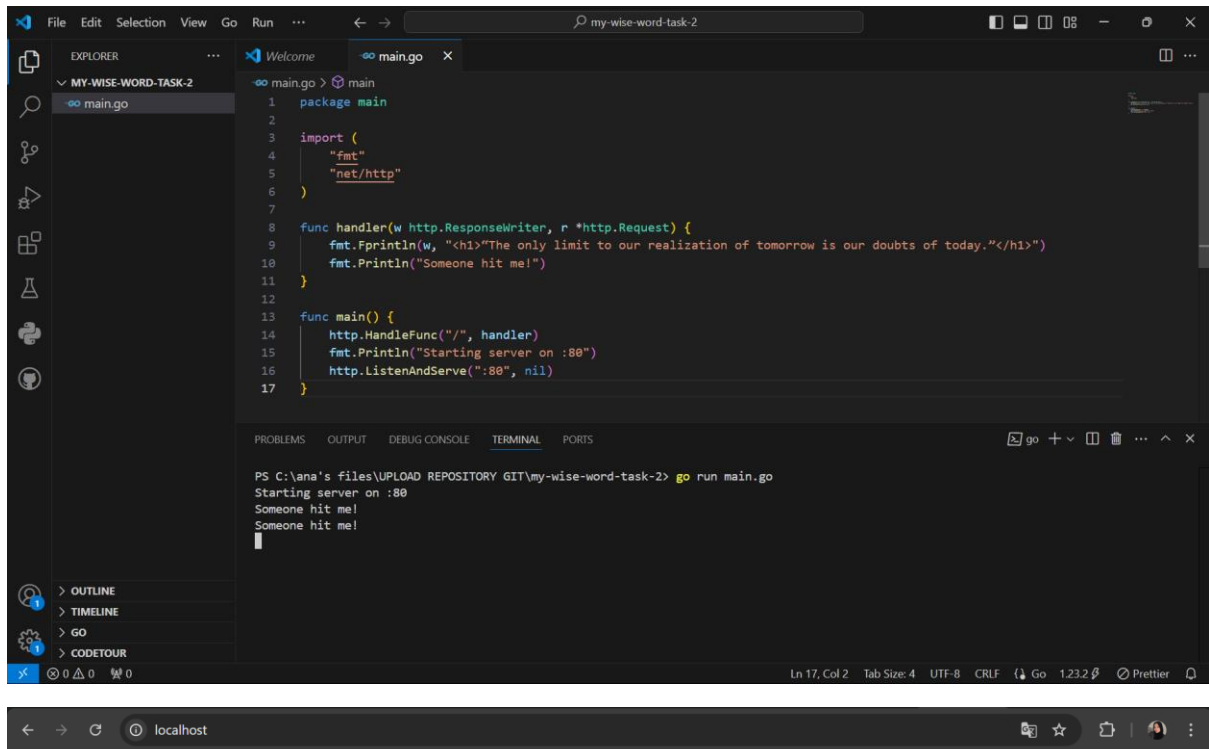


Task: Build Dockerfile to Docker Image

1. Created a simple Golang project that serves HTTP requests.



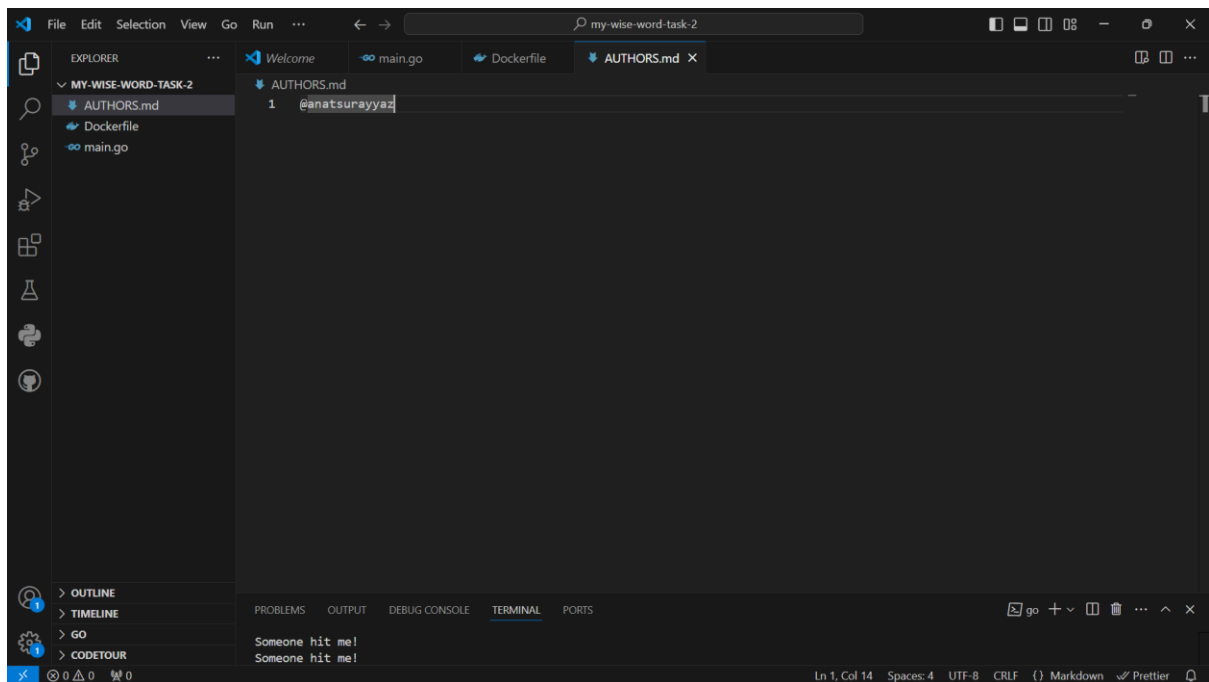
The screenshot shows the Visual Studio Code editor with a Go project named 'main.go' open. The code defines a simple HTTP server that prints a message when it receives a request. The terminal window shows the command 'go run main.go' being executed, and the output displays the server starting on port 80 and receiving two requests, each printing the message 'Someone hit me!'.

```
1 package main
2
3 import (
4     "fmt"
5     "net/http"
6 )
7
8 func handler(w http.ResponseWriter, r *http.Request) {
9     fmt.Fprintln(w, "<h1>The only limit to our realization of tomorrow is our doubts of today.</h1>")
10    fmt.Println("Someone hit me!")
11 }
12
13 func main() {
14    http.HandleFunc("/", handler)
15    fmt.Println("Starting server on :80")
16    http.ListenAndServe(":80", nil)
17 }
```

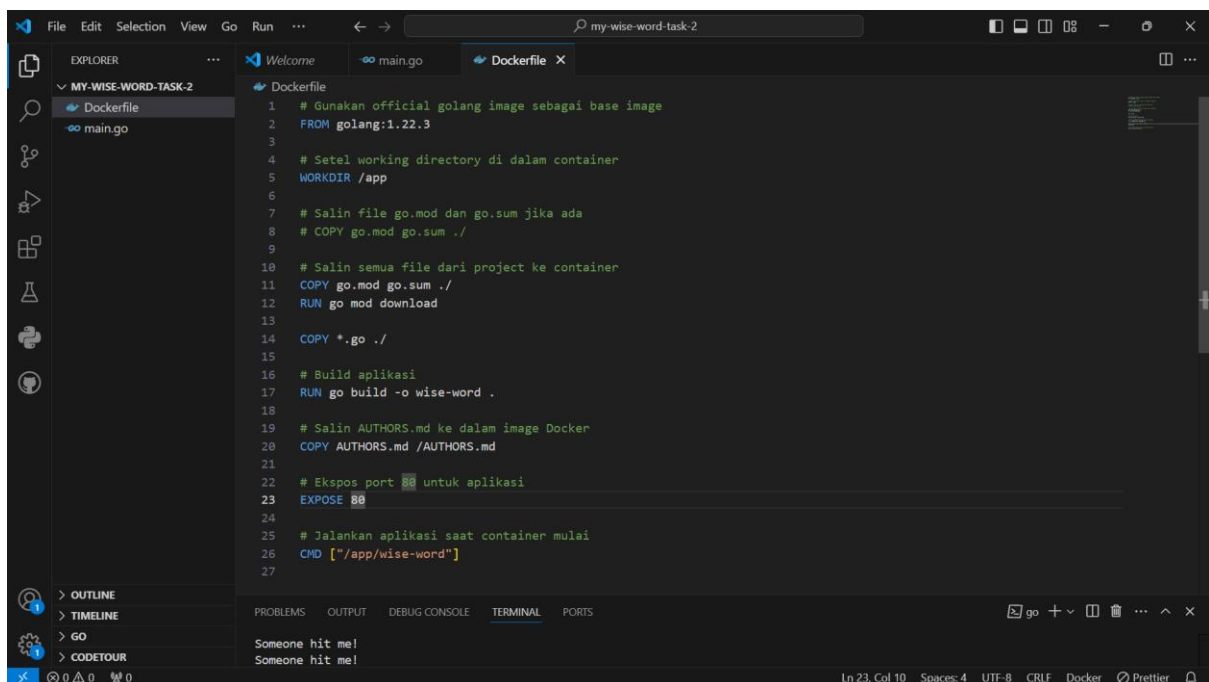
PS C:\ana's files\UPLOAD REPOSITORY GIT\my-wise-word-task-2> go run main.go
Starting server on :80
Someone hit me!
Someone hit me!

“The only limit to our realization of tomorrow is our doubts of today.”

2. Added a new file, "AUTHORS.md," in the Golang project and included my GitHub username, "@anatsurayyaz."

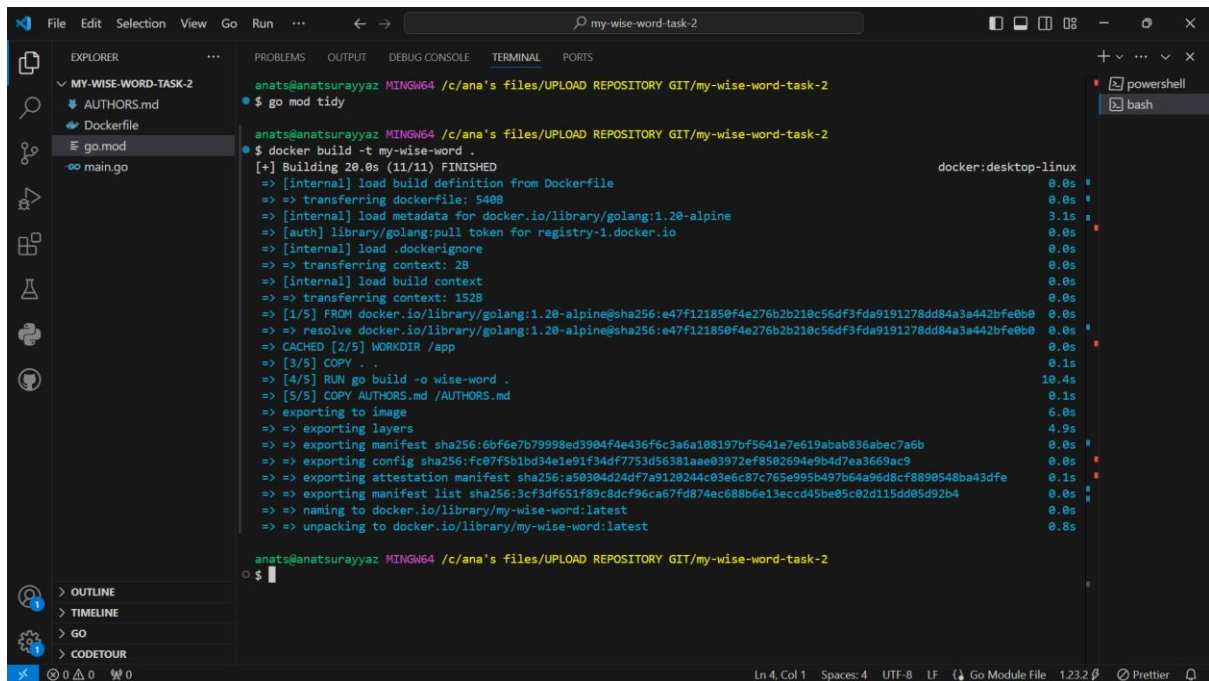


3. Created a Dockerfile to build and run the Golang project.



4. Built the Docker image using the following command:

⇒ `docker build -t my-wise-word .`



```
anats@anatsurayyaz MINGW64 /c/ana's files/UPLOAD REPOSITORY GIT/my-wise-word-task-2
$ go mod tidy

anats@anatsurayyaz MINGW64 /c/ana's files/UPLOAD REPOSITORY GIT/my-wise-word-task-2
$ docker build -t my-wise-word .
[+] Building 20.0s (11/11) FINISHED
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 540B
=> [internal] load metadata for docker.io/library/golang:1.20-alpine
=> [auth] library/golang:pull token for registry-1.docker.io
=> [internal] load .dockerignore
=> [internal] transferring context: 28
=> [internal] load build context
=> => transferring context: 152B
=> [1/5] FROM docker.io/library/golang:1.20-alpine@sha256:e47f121850f4e276b2b210c56df3fda9191278dd84a3a442bfe0b0
=> resolve docker.io/library/golang:1.20-alpine@sha256:e47f121850f4e276b2b210c56df3fda9191278dd84a3a442bfe0b0
=> CACHED [2/5] WORKDIR /app
=> [3/5] COPY . .
=> [4/5] RUN go build -o wise-word .
=> [5/5] COPY AUTHORS.md /AUTHORS.md
=> exporting to image
=> => exporting layers
=> => exporting manifest sha256:6bf6e7b79998ed3904f4e436f6c3a6a108197bf5641e7e619abab836abec7a6b
=> => exporting config sha256:fc07f5b1bd34e1e91f34df7753d56381aae03972ef8502694e9b4d7ea3669ac9
=> => exporting attestation manifest sha256:a50304d24df7a9120244c03e6c87c765e995b497b64a96d8cf8890548ba43dfe
=> => exporting manifest list sha256:3cf3df651f89c8dcf96ca67fd874ec688b6e13eccd45be05c82d115dd05d92b4
=> naming to docker.io/library/my-wise-word:latest
=> unpacking to docker.io/library/my-wise-word:latest

anats@anatsurayyaz MINGW64 /c/ana's files/UPLOAD REPOSITORY GIT/my-wise-word-task-2
$
```

5. Verified the image was successfully added by listing Docker images:

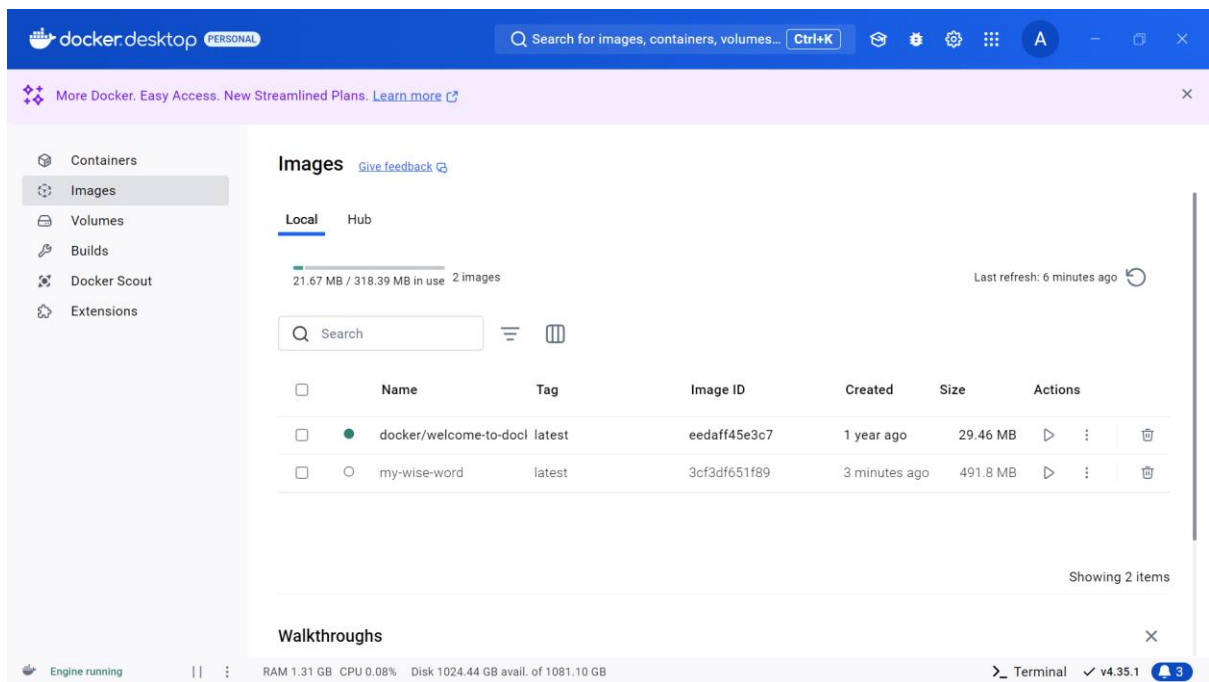
⇒ `docker image ls`



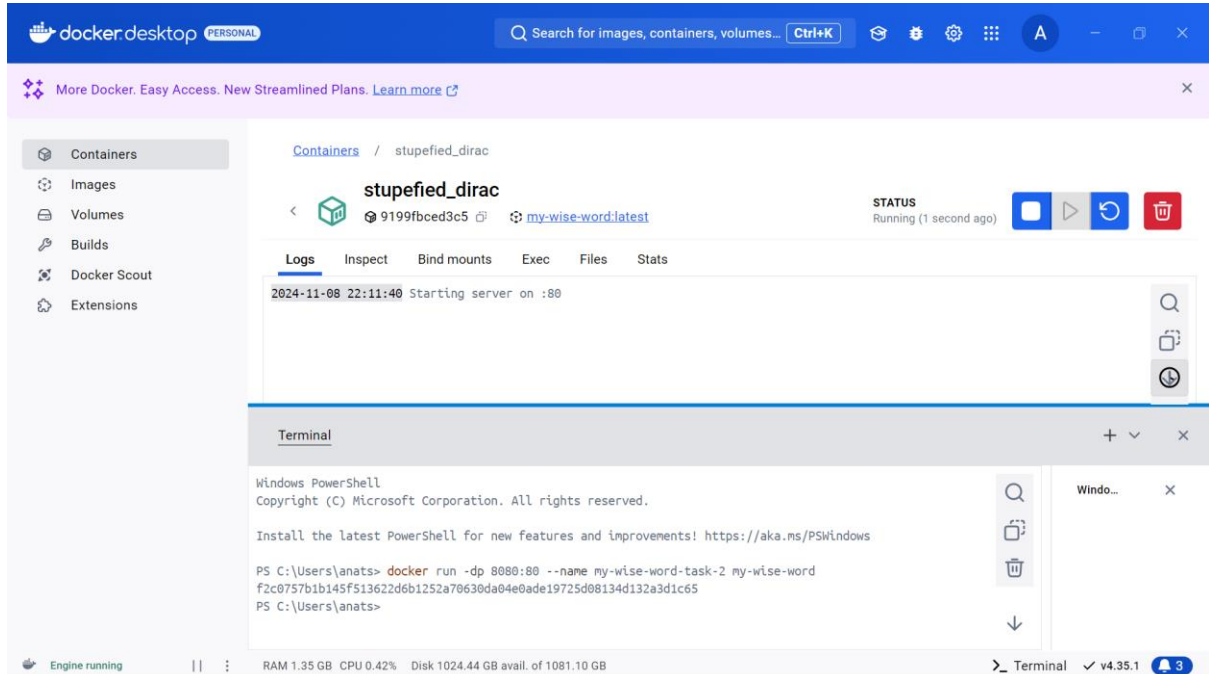
```
anats@anatsurayyaz MINGW64 /c/ana's files/UPLOAD REPOSITORY GIT/my-wise-word-task-2
$ docker image ls
REPOSITORY          TAG         IMAGE ID      CREATED        SIZE
my-wise-word         latest      3cf3df651f89  About a minute ago  492MB
docker/welcome-to-docker latest      eedaff45e3c7  12 months ago   29.5MB

anats@anatsurayyaz MINGW64 /c/ana's files/UPLOAD REPOSITORY GIT/my-wise-word-task-2
$
```

The image successfully added

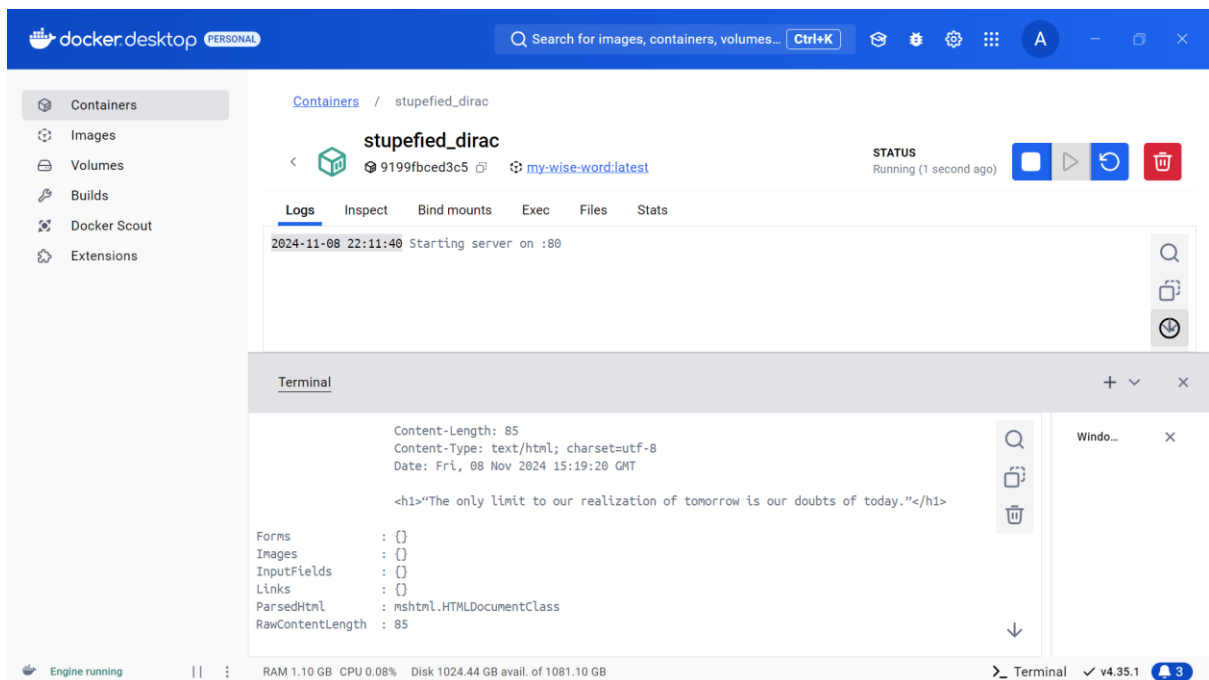
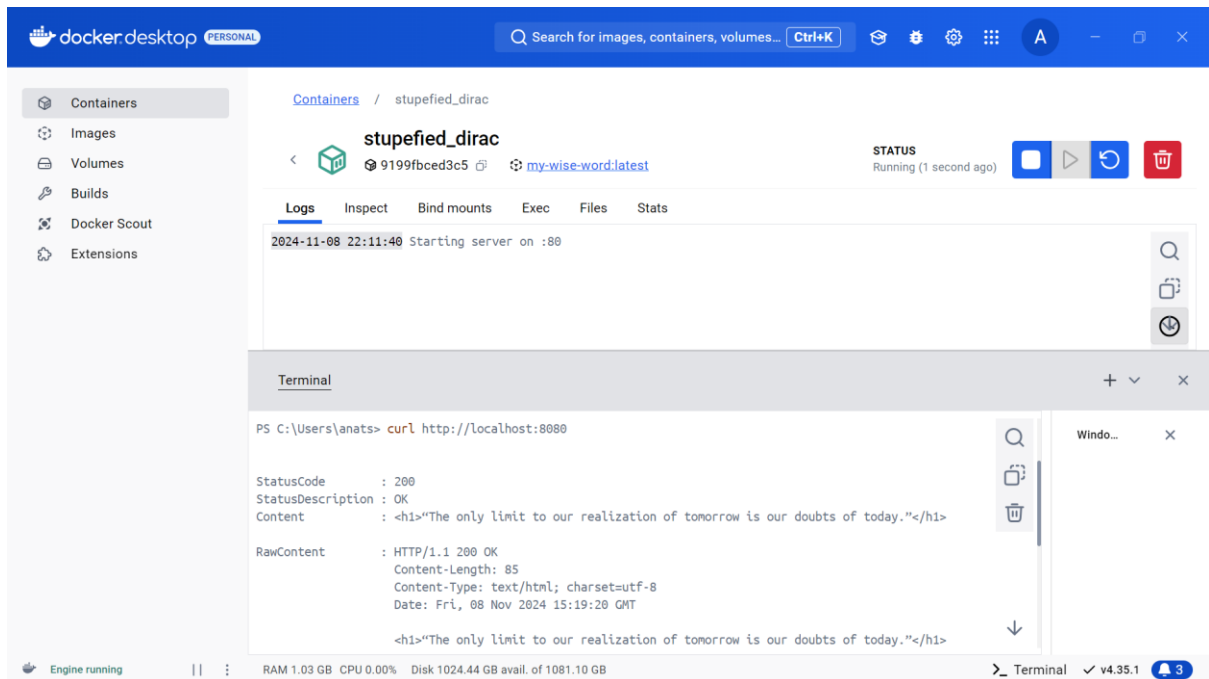


6. Ran a new container with the name “my-wise-word-task-2” using the command:
⇒ `docker run -dp 8080:80 --name my-wise-word-task-2 my-wise-word`



7. Exposed the application on host port 8080 and verified it with:

⇒ `curl http://localhost:8080`



8. Displayed the logs of the "my-wise-word-task-2" container to check for activity and confirm the application is running as expected.

Terminal

```
PS C:\Users\anats> docker logs my-wise-word-task-2
Starting server on :80
Someone hit me!
```

