Prerequisites

Docker Desktop installed and running on your machine.

Verify in Terminal: docker version

Visual Studio Code installed.

(Recommended) VS Code extensions:

Docker (by Microsoft)

Remote - Containers (optional)

Git (optional, for commits)

Have your project folder calculator-project/ on disk and organized as:

```
calculator-project/
├── Dockerfile
└── site/
    ├── index.html
    └── styles.css
```

Click the Extensions icon (left sidebar) or press ⇧⌘X (Mac) / Ctrl+Shift+X (Win).

Search for Docker (Microsoft) and click Install.

After install, you'll see a new Docker icon in the Activity Bar (left side).

Make sure Docker Desktop is started. On macOS check the whale icon in the menu bar.

In VS Code open a built-in terminal: `Ctrl+`` (backtick) or View → Terminal.

run the below command-:

docker ps

Now Using the Terminal in VS Code

Open terminal in VS Code (View → Terminal).

Run these commands (from repo root where Dockerfile is):

stop & remove old container if it exists (safe)

docker stop my-website-container || true

docker rm my-website-container || true

docker rmi my-website-image || true

build fresh without cache (ensures latest files copied)

docker build --no-cache -t my-website-image .

Run the container

docker run -d -p 8080:80 --name my-website-container my-website-image

Quick Command Summary-:

```
# inside VS Code terminal, at project root

# ensure correct filename

ls site

# rebuild from scratch

docker stop my-website-container || true

docker rm my-website-container || true

docker rmi my-website-image || true

docker build --no-cache -t my-website-image .

docker run -d -p 8080:80 --name my-website-container my-website-image


# view logs

docker logs -f my-website-container


# inspect files inside container

docker exec -it my-website-container sh -c "ls -l /usr/share/nginx/html && head -n 20 /usr/share/nginx/html/styles.css"
```