Got it — you want to **run a Python code using Docker**.

I'll explain it clearly, step-by-step:

# **X** Steps to Run Python Code Using Docker:

### 1. Install Docker

- Make sure **Docker** is installed on your system.
- Check it by running:
- docker --version

•

• If not installed, install it from <u>Docker Official Site</u>.

## 2. Create Your Python Project

```
Suppose you have a simple Python file, for example app.py:
```

```
# app.py
print("Hello from Dockerized Python app!")
```

#### 3. Create a Dockerfile

In the same folder where app.py is, create a file called Dockerfile (no extension).

```
Here's a simple Dockerfile:
```

# Run the Python program

```
# Use the official Python image from Docker Hub
FROM python:3.10

# Set the working directory inside the container
WORKDIR /usr/src/app

# Copy the current directory contents into the container
COPY . .
```

```
CMD ["python", "app.py"]
```

## Explanation:

- FROM python:3.10 → Use a ready-made Python 3.10 environment.
- WORKDIR /usr/src/app → Inside the container, move to this directory.
- COPY . . → Copy everything from your project folder into the container.
- CMD ["python", "app.py"] → Run your Python file.

## 4. Build the Docker Image

In your terminal, navigate to your project folder and run:

```
docker build -t my-python-app .
```

### Explanation:

- -t my-python-app → Names your Docker image "my-python-app".
- . → Means "build from the current directory".

## 5. Run the Docker Container

Now run your image:

```
docker run my-python-app
```

You should see:

Hello from Dockerized Python app!

Congratulations, you just ran Python code inside Docker!

## **Summary Diagram (ASCII)**

[Local Code] --> [Dockerfile Created] --> [Docker Image Built] --> [Docker Container Runs] --> [Python Code Executes]

## **Quick Commands Summary:**

**Step Command** 

Check Docker docker --version

Installed

docker build -t my-python-

Build Image app

Run Container docker run my-python-app

Would you like me also to show you how to:

• Attach external files/data folders?

- Use requirements.txt if you have external Python libraries?
- Run interactive Python (e.g., Jupyter or REPL) inside Docker?

Tell me, and I'll explain next!