

## ASSIGNMENT – 4

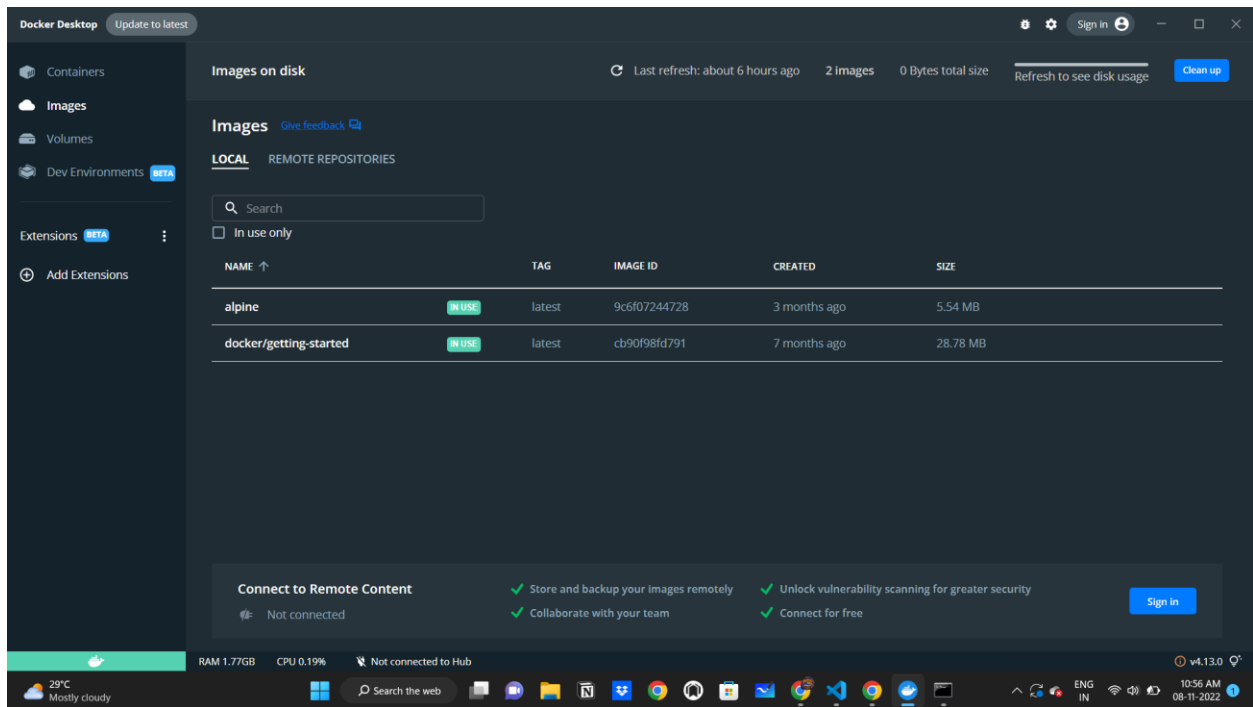
### PLASMA DONOR APPLICATION

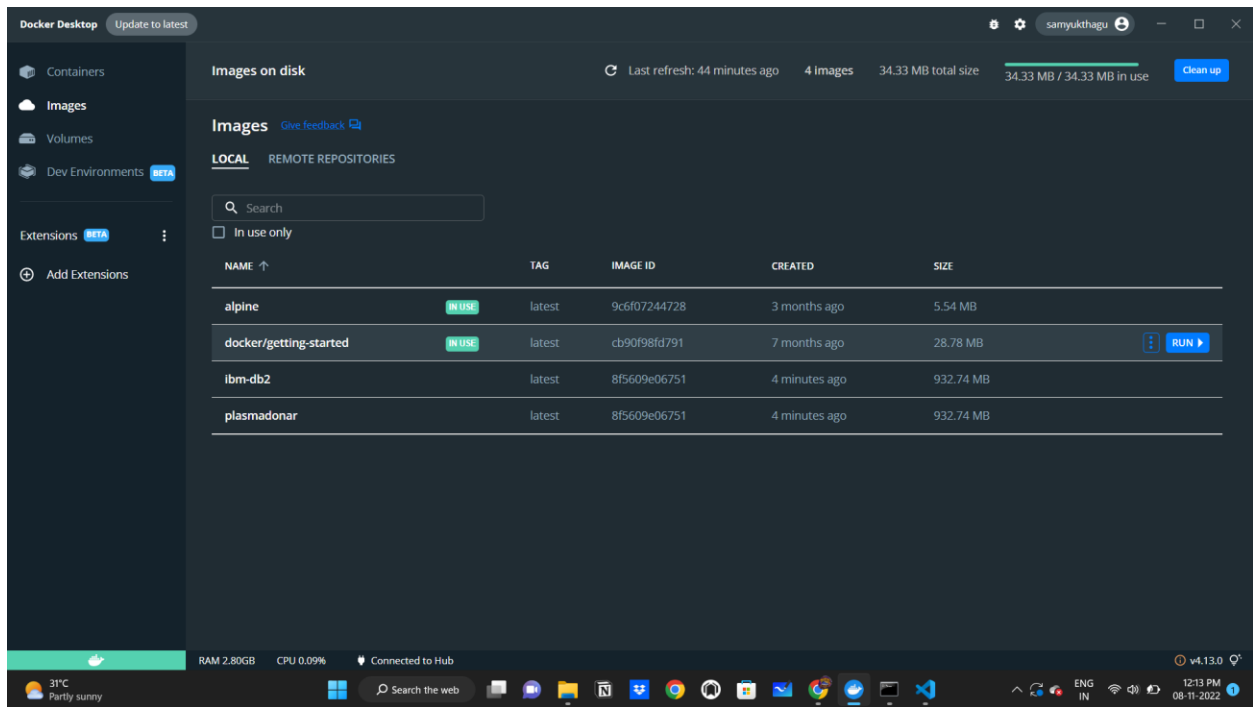
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#### Questions :

- 1.Pull an Image from docker hub and run it in docker playground.
- 2.Create a docker file for the job portal application and deploy it in Docker desktop application.
- 3.Create a IBM container registry and deploy hello world app or job portal app.
- 4.Create a Kubernetes cluster in IBM cloud and deploy hello world image or job portal image and also expose the same app to run in node port.

#### Pull an image from docker hub :





## Coding for pull an image in docker hub :

```
Microsoft Windows [Version 10.0.22000.1098]
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C:\Users\parva>docker run -d -p 80:80 docker/getting-started
Unable to find image 'docker/getting-started:latest' locally
latest: Pulling from docker/getting-started
d99b388f04e: Pull complete
5867c8a5fcd: Pull complete
4b639e5c3b3: Pull complete
061ed9e2b976: Pull complete
bc19f3e8eeb1: Pull complete
4071be97c256: Pull complete
79f586f1a54b: Pull complete
0c9732f525d6: Pull complete
Digest: sha256:b558be874169471bd4e65bd6eac8c303b271a7ee8553ba47481b73b2bf597aae
Status: Downloaded newer image for docker/getting-started:latest
ac9ce08124cf2d8e433bb14de75ccd79902b99ad5c4d680bc90513741b65f26b

C:\Users\parva>docker container run alphino echo "Hello world"
Unable to find image 'alphino:latest' locally
docker: Error response from daemon: pull access denied for alphino, repository does not exist or may require 'docker login': denied: requested access to the resource is denied.
See 'docker run --help'.

C:\Users\parva>docker container run alpine echo "Hello world"
Unable to find image 'alpine:latest' locally
latest: Pulling from library/alpine
213ec9aee27d: Pull complete
Digest: sha256:bc41182d7ef5fffc53a40b8d4e725193bc10142a1243f395ee852a8d9738fc2ad
Status: Downloaded newer image for alpine:latest
Hello world

C:\Users\parva>cd..

C:\Users>docker run -d -p 80:80 docker/getting-started
ad4e6cfad09566c857edc768b731cf8fc64dc3fc7cbc64bc0124e5fab383b4ec
docker: Error response from daemon: driver failed programming external connectivity on endpoint sweet_vaughan (e2fee54ddc66e45a890e8f1189f79c70ac1ed4e5f1da6a0c42d373487ae2dba1): Bind for 0.0.0.0:80 failed: port
is already allocated.

C:\Users>docker container run alphino echo "Hello world"
Unable to find image 'alphino:latest' locally
docker: Error response from daemon: pull access denied for alphino, repository does not exist or may require 'docker login': denied: requested access to the resource is denied.
See 'docker run --help'.

C:\Users>
```

[illegible]

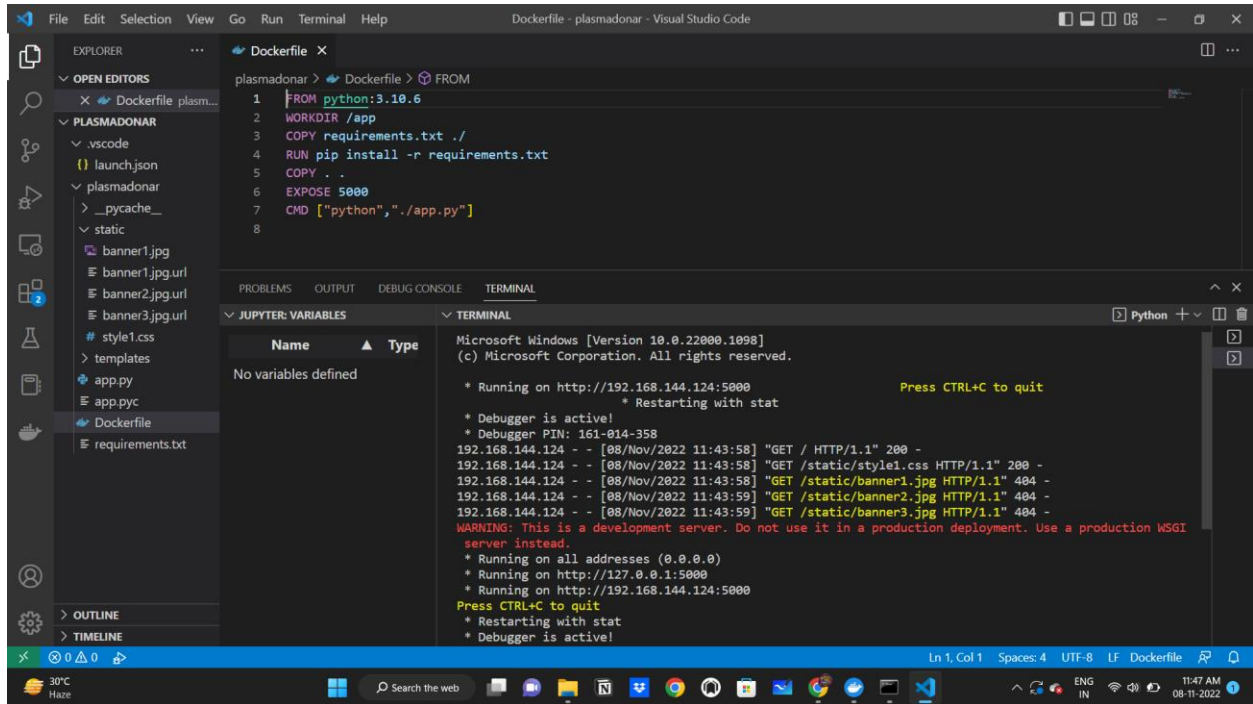
```

C:\Users\parva\Downloads\plasmadonor\plasmadonor>docker build -t plasmadonor .

[*] Building 573.2s (8/9)
[+] Internal] load build definition from Dockerfile
[+] >> transferring dockerfile: 179B
[+] Internal] load .dockerignore
[+] >> transferring context: 2B
[+] Internal] load metadata for docker.io/library/python:3.10.4
[+] [1/5] FROM docker.io/library/python:3.10.4@sha256:745efefb74daa9a8a422bdc0208c35a603e8979a2481296771b3be6aa01852
553.7s
[+] >> resolve docker.io/library/python:3.10.4@sha256:745efefb74daa9a8a422bdc0208c35a603e8979a2481296771b3be6aa01852
0.0s
[+] >> sha256:8d3f1843caaf3b3cc5d026e795883604d8070b17eb7fc56d8f37ac31fca / 2.22kB / 2.22kB
0.0s
[+] >> sha256:3e94d13e55e7ade177f2317b551095c7c1700331f5784aa09200608b1f6ed / 5.16MB / 5.16MB
17.5s
[+] >> sha256:1ef72728c3c7702772077b1da5c3a5855da615003365706 / 20.10MB / 18.80MB
48.3s
[+] >> sha256:7d5c9f6b74daa9a8a422bdc0208c35a603e8979a2481296771b3be6aa01852 / 2.35kB / 2.35kB
0.0s
[+] >> sha256:d25a66100810283003f7f69dd7777bba5c6db31b126f08e7d118905704646cf84 / 8.53kB / 8.53kB
0.0s
[+] >> sha256:1671565cc08fc365c9661d3f3c16e73a01316436c1759588428f99a6da2e / 55.01MB / 55.01MB
192.0s
[+] >> sha256:53a0072f9cd1f6c8eb9f182b28e758613accef608a6cf0f10d3c80de1903a / 54.50MB / 54.50MB
247.2s
[+] >> sha256:cd0893179530710377417701ef59302af6613c7009c8528eac3150e94da / 196.79MB / 196.79MB
532.7s
[+] >> sha256:809246d69f4261e7e32216e4d4cf4f69edf04428aa18db1791d1e24dc / 6.20MB / 6.20MB
261.7s
[+] >> extracting sha256:1671565cc08fc365c9661d3f3c16e73a01316436c1759588428f99a6da2e
3.0s
[+] >> extracting sha256:3e94d13e55e7ade177f2317b551095c7c1700331f5784aa09200608b1f6ed
0.0s
[+] >> extracting sha256:fabc7528c68521612908e570f362a7802e7b1da585ab855daa4150883065706
0.3s
[+] >> sha256:c71afcc70396dc4451d3c14850a4f1b3b390830410057ea22c6a8a1d305a5 / 20.03MB / 20.03MB
361.4s
[+] >> extracting sha256:53a0072f9cd1f6c8eb9f182b28e758613accef608a6cf0f10d3c80de1903a / 54.50MB / 54.50MB
2.7s
[+] >> sha256:80a4083c70455306c85f1c1212bawc1c07040f6305f9f3c508da205413ca40b / 234B / 234B
256.2s
[+] >> sha256:433402fe0291d19ddc1c3559091aae88f21601a7c85a1c6d6a04c48f6ed3c / 3.04MB / 3.04MB
275.0s
[+] >> extracting sha256:00a093117531b7183761701ef59302af6613c7009c8528eac3150e94da
12.9s
[+] >> extracting sha256:cd0893179530710377417701ef59302af6613c7009c8528eac3150e94da
0.0s
[+] >> extracting sha256:c71afcc70396dc4451d3c14850a4f1b3b390830410057ea22c6a8a1d305a5 / 20.03MB / 20.03MB
0.0s
[+] >> extracting sha256:80a4083c70455306c85f1c1212bawc1c07040f6305f9f3c508da205413ca40b
0.0s
[+] >> extracting sha256:433402fe0291d19ddc1c3559091aae88f21601a7c85a1c6d6a04c48f6ed3c
0.0s
[+] Internal] load build context
[+] >> transferring context: 331.05kB
0.1s
[+] [2/5] WORKDIR /app
0.3s
[+] [3/5] COPY requirements.txt /
0.1s
[+] [4/5] RUN pip install -r requirements.txt
12.3s
[+] [5/5] COPY . .
0.2s

```

## Docker File :



The screenshot shows the Visual Studio Code interface with a Dockerfile open in the editor. The Dockerfile contains the following instructions:

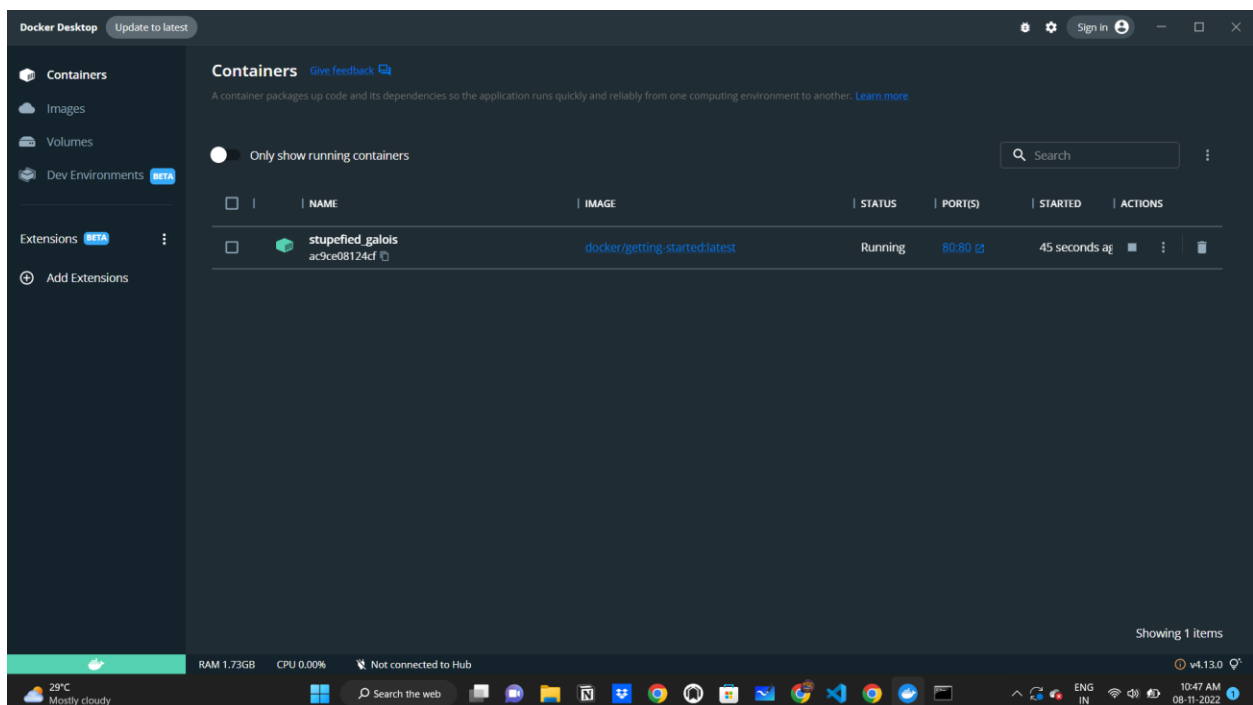
```
1 FROM python:3.10.6
2 WORKDIR /app
3 COPY requirements.txt ./
4 RUN pip install -r requirements.txt
5 COPY . .
6 EXPOSE 5000
7 CMD ["python", "./app.py"]
8
```

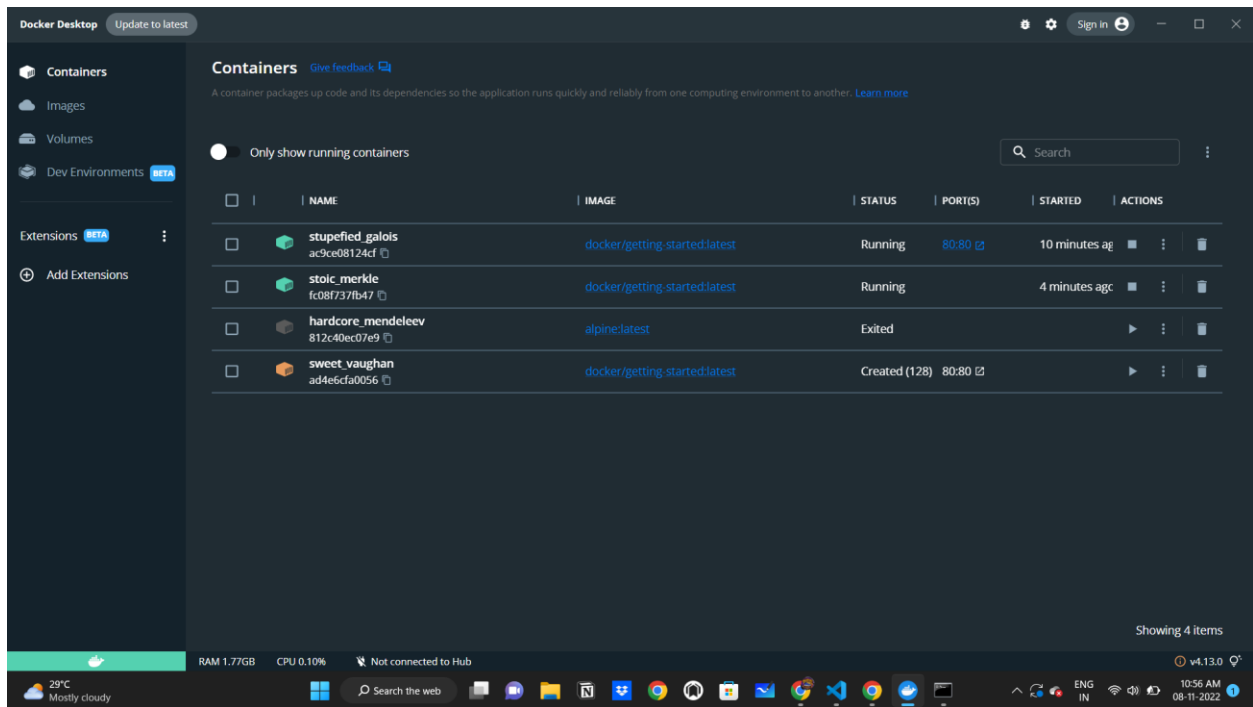
The terminal window shows the output of the Docker build and run process. It indicates that the container is running on http://192.168.144.124:5000 and displays the following logs:

```
Microsoft Windows [Version 10.0.22000.1098]
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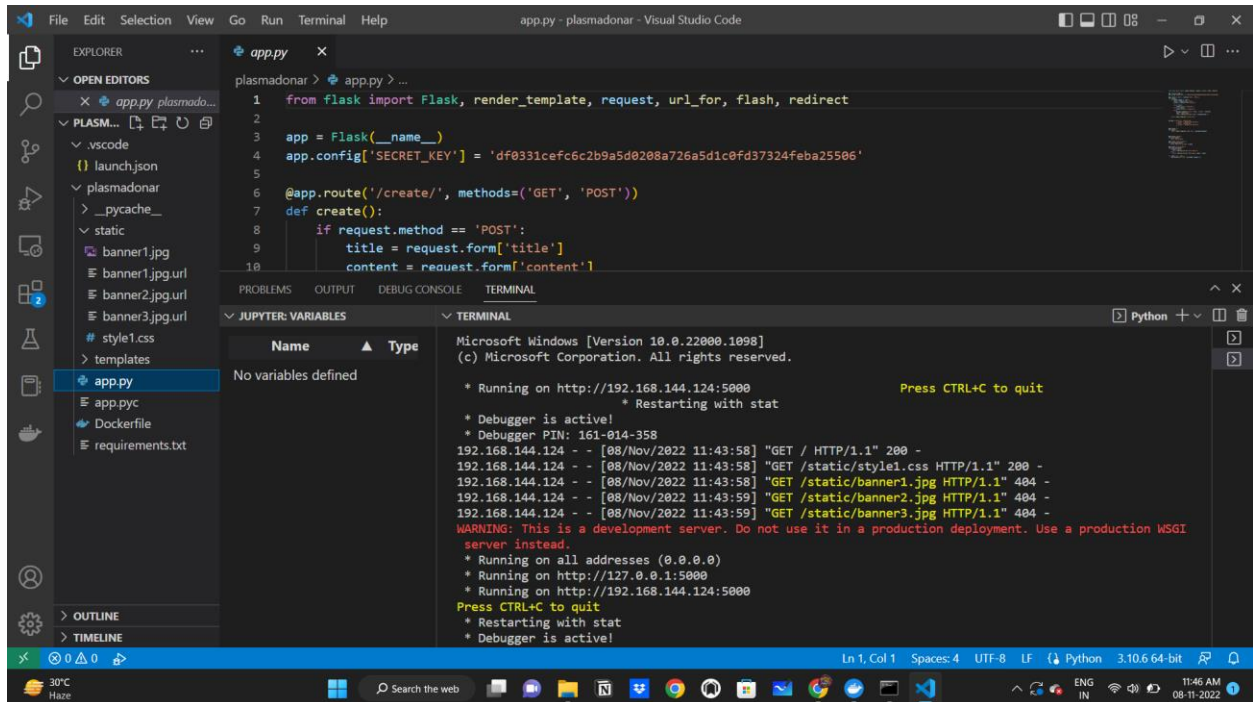
* Running on http://192.168.144.124:5000
* Restarting with stat
* Debugger is active!
* Debugger PIN: 161-814-358
192.168.144.124 - - [08/Nov/2022 11:43:58] "GET / HTTP/1.1" 200 -
192.168.144.124 - - [08/Nov/2022 11:43:58] "GET /static/style1.css HTTP/1.1" 200 -
192.168.144.124 - - [08/Nov/2022 11:43:58] "GET /static/banner1.jpg HTTP/1.1" 404 -
192.168.144.124 - - [08/Nov/2022 11:43:58] "GET /static/banner2.jpg HTTP/1.1" 404 -
192.168.144.124 - - [08/Nov/2022 11:43:58] "GET /static/banner3.jpg HTTP/1.1" 404 -
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI
server instead
* Running on all addresses (0.0.0.0)
* Running on http://127.0.0.1:5000
* Running on http://192.168.144.124:5000
Press CTRL+C to quit
* Restarting with stat
* Debugger is active!
```

## IBM Container :





Hello world program :



## Home Page :

