

Create a dockerfile, docker-compose file which when executed must display your basic details in the website.

### STEP 1 - Create a dockerfile

```
FROM python:3.9
WORKDIR /class
COPY ./api_demo.py /class
RUN pip install requests
EXPOSE 4000
CMD ["python", "api_demo.py"]
```

Docker build -t tag . command is used build an image

```
root@ip-172-31-32-49:/home/ubuntu/git-to-github# docker build -t karthi .
[+] Building 1.4s (9/9) FINISHED
=> [internal] load build definition from dockerfile
=> => transferring dockerfile: 161B
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [internal] load metadata for docker.io/library/python:3.9
=> [1/4] FROM docker.io/library/python:3.9@sha256:269252d0fb065c8e27ee77c1bade3fdded0c450ed3040c07c7d8256b592edf1a
=> [internal] load build context
=> => transferring context: 33B
=> CACHED [2/4] WORKDIR /class
=> CACHED [3/4] COPY ./api_demo.py /class
=> CACHED [4/4] RUN pip install requests
=> exporting to image
=> => exporting layers
=> => writing image sha256:0a65279dac801b7909c7f3618255fdcc4c6f383af385a21e18dec6deadd222c9
=> => naming to docker.io/library/karthi
```

Docker image command is for display the images

```
root@ip-172-31-32-49:/home/ubuntu/git-to-github# docker images
REPOSITORY          TAG             IMAGE ID        CREATED         SIZE
karthi              latest          0a65279dac80   10 minutes ago 1.01GB
metric             latest          0a65279dac80   10 minutes ago 1.01GB
classic            latest          cf6fb9c58af2   36 minutes ago 1.02GB
root@ip-172-31-32-49:/home/ubuntu/git-to-github# S
```

## STEP 2 - docker-compose file.yml

```
version: '3'
service:
  python:
    image: karthi
    container_name: teams_of_fine
    ports:
      - "80:4000:"
```

**Docker-compose up** is for run the config

**Docker run -itd** for run container in detach and interacting mode

**-p** is for list the port number where the container was created

**Docker ps -a** is to list the created container

```
root@ip-172-31-32-49:/home/ubuntu/git-to-github# vim docker-compose.yml
root@ip-172-31-32-49:/home/ubuntu/git-to-github# docker-compose up
[+] Running 2/1
 ✓ Network git-to-github_default Created
 ✓ Container don_dom Created
Attaching to don_dom
don_dom | Random Cat Fact:
don_dom | {"data":["A cat's whiskers are thought to be a kind of radar, which helps a cat gauge the space it intends to walk through."
don_dom exited with code 0
root@ip-172-31-32-49:/home/ubuntu/git-to-github# vim docker-compose.yml
root@ip-172-31-32-49:/home/ubuntu/git-to-github# docker run -itd -p 80:4000 karthi
c823dade87cdcc3f5fe44b20299d139bea099bd0e5bfb6606baadf4884ac8295
root@ip-172-31-32-49:/home/ubuntu/git-to-github# docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
c823dade87cd	karthi	"python api_demo.py"	7 seconds ago	Exited (0) 5 seconds ago		thirsty_rosalind
5d91a49f2a1d	karthi:latest	"python api_demo.py"	About a minute ago	Exited (0) About a minute ago		don_dom
b678da61a964	0a65279dac80	"python api_demo.py"	23 minutes ago	Exited (0) 19 minutes ago		friend
6912a51a4b0e	0a65279dac80	"python api_demo.py"	24 minutes ago	Exited (0) 24 minutes ago		friends