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**Docker file**

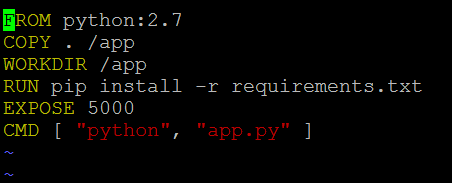
**Docker File-Container 🡪 Build and Execution**

Topic will cover docker file build-execution and bridge between two or more docker containers and its communication.

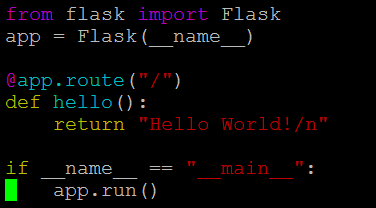
* Create Ubuntu 16.04 machine.
* Login to instance as sudo user: **sudo su –**
* For Example, we create Flask Application and run on Ubuntu using docker file
* Create directory “**dockerdemo/flask-demo**” in **/opt**: **mkdir dockerdemo/flask-demo**



* First Create Docker file**: vi Dockerfile**



* Second create python app file: **vi app.py**



* Third Create Requirement Flask: **vi requirement.txt 🡪** which run necessary flask files

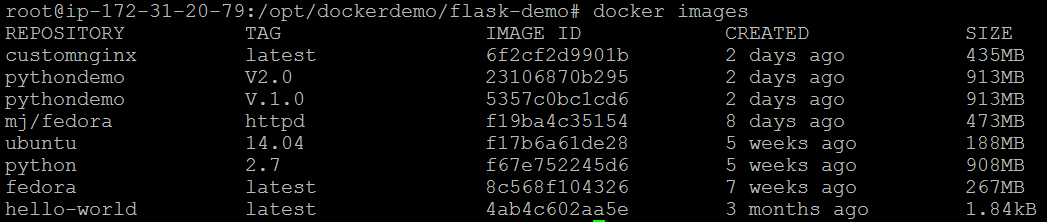


* Now build docker file: **docker build . -t pythondemo:V.1.0**

**Docker build . -t(tag name) pythondemo(NameOfApp):latest(Version)**



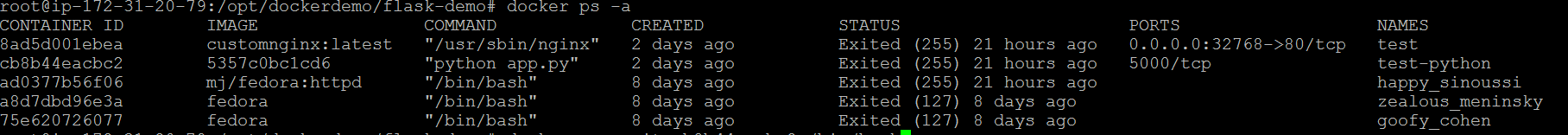
Docker image will get created with name “**pythondemo“**



* Now RUN docker images: **docker run --name test-python -d ImageId**



* Now Execute Docker container: **docker exec -it container\_id /bin/bash**





* Once we will execute docker container, to check application output:

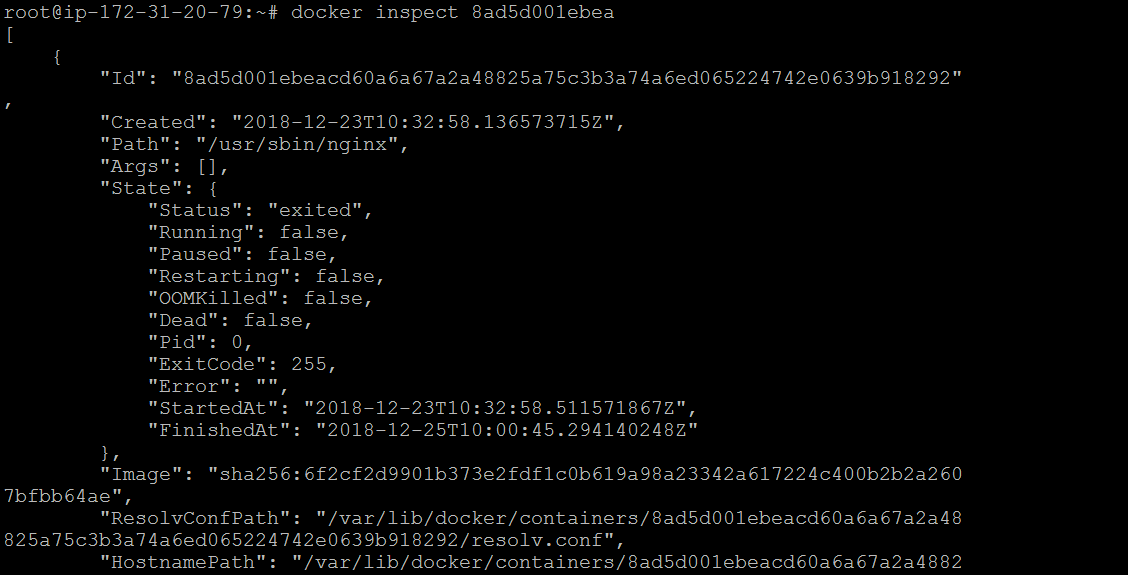
**curl localhost:5000**

(RUN above command inside docker, we have mapped outside port as 5000)

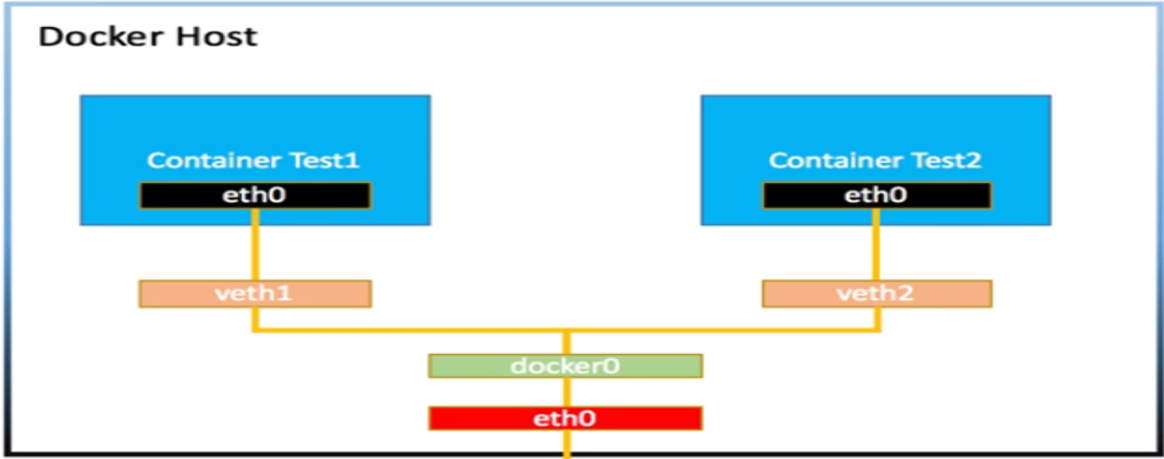


* To Inspect the Docker Container configuration: - It will show all configuration related to IP addresses, memory details, path of container and policy details

**docker inspect 8ad5d001ebea**



* Docker Bridging 🡪



1. **ip link add veth-1 type veth peer name veth-2**
2. **ip link**
3. **ip netns add test1**
4. **ip link set veth-1 netns test1**
5. **ip netns exec test1 ip link**
6. **ip addr add 192.168.1.1/24 dev veth-2**
7. **ip link set dev veth-2 up**
8. **ip link**
9. **ip netns exec ip addr add 192.168.1.2/24 dev veth-1**
10. **ip netns exec test1 ip addr add 192.168.1.2/24 dev veth-1**
11. **ip netns exec test1 ip link set dev veth-1 up**
12. **ip link**
13. **ip netns exec test1 ip link**
14. **ip netns exec test1 ping 192.168.1.1**
15. **ip netns exec test1 ip a**