## Section 2. "Running Multiple Containers"

Links:

https://github/pythonincontainers/sqlalchemy-psql

```
Commands:
```

```
$ docker run -d -p 5000:5000 --name simple-flask
pythonincontainers/simple-flask
$ docker run -it --name centos centos
# curl 127.0.0.1:5000
$ docker inspect --format "{{.NetworkSettings.IPAddress}}"
simple-flask
$ docker inspect --format "{{.NetworkSettings.IPAddress}}"
centos
# curl 172.17.0.2:5000
# exit
$ docker run --rm -it --name centos --add-host simple-
flask:172.17.0.2 centos
# curl simple-flask:5000
# exit
$ docker run --rm -it --name centos --add-host simple-
flask:$(docker inspect --format "{{.NetworkSettings.IPAddress}}"
simple-flask) centos
$ docker rm -f simple-flask
$ docker network create my-net
$ docker run -d --name simple-flask --network my-net
pythonincontainers/simple-flask
$ docker run --rm -it --name centos -network my-net centos
# curl simple-flask:5000
```

## Python in Containers Course Materials

```
$ docker run -d --name proxy-server -network my-net nginx
# curl proxy-server:80
# exit
$ docker run -d --name simple-flask pythonincontainers/simple-
flask
$ docker run --rm -it --link webserver:simple-flask centos
# curl webserver:5000
# curl simple-flask:5000
# more /etc/hosts
# env
# exit
$ docker run -d --name postgres --network my-net -env
"POSTGRES PASSWORD=mysecret" postgres
$ docker logs postgres
$ docker run -d --name pgadmin --network my-net -e
"PGADMIN DEFAULT EMAIL=user@example.com" -e
"PGADMIN DEFAULT PASSWORD=supersecret" -p 8088:80 dpage/pgadmin4
$ git clone https://github/pythonincontainers/sqlalchemy-psql
$ cd sqlalchemy-psql
$ atom .
$ docker run --rm -it -v ${PWD}:/app --network my-net python
bash
# cd /app
# pip install -r requirements.txt
# pip alchemy-psql.py
# grep create engine alchemy-psql.py
# exit
```