

DOCKER COMPOSE

Docker compose file

```
jhon@jhon-VirtualBox:~/docker-homework$ more docker-compose.yml
version: '3.1'
services:
  mariadb:
    image: mariadb:10.7
    ports:
      - 3306:3306

    environment:
      - MYSQL_ROOT_PASSWORD=S3cret
      - MYSQL_PASSWORD=An0thrS3cret
      - MYSQL_USER=citizix_user
      - MYSQL_DATABASE=citizix_db

  observatory-service:
    build: ./pythonapi # path is relative to docker-compose.yml location
    volumes:
      - ./pythonapi:/usr/src/app # mount point
    ports:
      - 5001:80 # host:container
```

Dockercompose ps

```
jhon@jhon-VirtualBox:~/docker-homework$ docker-compose ps

```

Name	Command	State	Ports
dockerhomework_mariadb_1	docker-entrypoint.sh mariadb	Up	0.0.0.0:3306->3306/tcp
dockerhomework_observatory-service_1	python api.py	Up	0.0.0.0:5001->80/tcp

```
jhon@jhon-VirtualBox:~/docker-homework$
```

API Docker file

```
jhon@jhon-VirtualBox:~/docker-homework/pythonapi$ more Dockerfile
# https://hub.docker.com/r/library/python/tags/
FROM python:3-onbuild

# Coping source in current directory into the image
# python:3-onbuild expects the source in /usr/src/app
COPY . /usr/src/app

# Commands in a list
CMD ["python", "api.py"]
```

Api file

```
jhon@jhon-VirtualBox:~/docker-homework/pythonapi$ more api.py
# Observatory Service

# Import framework
from flask import Flask
from flask_restful import Resource, Api

# Instantiate the app
app = Flask(__name__)
api = Api(app)

class Observatory(Resource):
    def get(self):
        return {
            'Galaxies': ['Milkyway', 'Andromeda',
                'Large Magellanic Cloud (LMC)']
        }

# Create routes
api.add_resource(Observatory, '/')

# Run the application
if __name__ == '__main__':
    app.run(host='0.0.0.0', port=80, debug=True)
```