

## Section Quick Start

### Lecture Basic Python Runtime Environment in Docker

Links:

- [https://hub.docker.com/\\_/python](https://hub.docker.com/_/python)
- <https://github.com/d4py/d4py>
- <https://pypi.org/project/Django/>

Commands:

```
$ docker run -it --name mypython1 -p 5000:5000 -p 8000:8000 -v
${PWD}:/app python:3.7 bash

$ docker start -ia mypython1

$ docker rm mypython1


$ cd d4py/section-3/basic-env

$ atom .

$ docker run -it --name myflask1 -p 5000:5000 -v ${PWD}:/app
python:3.7 bash

# python

>>> exit()

# pip install flask==1.1.1

# cd /app

# ls

# more flask_example.py

# export FLASK_APP=flask_example.py

# export FLASK_DEBUG=1

# flask run --host=0.0.0.0

# exit

$ docker run -it --name mydjango1 -p 8000:8000 -v ${PWD}:/app
python:3.8 bash

# pip install django==2.2.6

# cd /app

# django-admin startproject teststest
```

```
# ls -l
# cd testsite
# python manage.py runserver 0:8000
# python manage.py startapp app1
# ls -l
$ sudo chown -R kris:kris testsite
```

In *app1/views.py*:

```
from django.http import HttpResponse
def index(request):
    return HttpResponse("Hello World! I run in a Python Runtime
Container! ")
```

In *app1/urls.py*:

```
from django.urls import path
from . import views

urlpatterns = [
    path('', views.index, name='index'),
]
```

In *testsite/urls.py*:

```
...
from django.urls import path, include
...
    path('', include('app1.urls')),
...
```

```
# python manage.py migrate
# python manage.py runserver 0:8000
# exit

$ docker run -it --name mydjango-beta -p 8000:8000 -v ${PWD}:/app
python:3.8 bash

# pip install django==3.0b1
# cd /app/testsite
# python manage.py runserver 0:8000
# exit

$ docker start -ia mydjango1
# cd /app/testsite
# python manage.py runserver 0:8000
# exit

# docker rm mydjango-beta
```