

```
soha@ubuntu:~/depi_r3/lec10$ docker pull python:3.9.23-alpine3.22
3.9.23-alpine3.22: Pulling from library/python
9824c27679d3: Pull complete
596282ba7530: Pull complete
d325733a6252: Pull complete
e9a57d92e270: Pull complete
Digest: sha256:372f3cfc1738ed91b64c7d36a7a02d5c3468ec1f60c906872c3fd346dda8cbbb
Status: Downloaded newer image for python:3.9.23-alpine3.22
docker.io/library/python:3.9.23-alpine3.22
soha@ubuntu:~/depi_r3/lec10$ ls
simple_flask_app
soha@ubuntu:~/depi_r3/lec10$ cd simple_flask_app
soha@ubuntu:~/depi_r3/lec10/simple_flask_app$ ls
app.py Jenkinsfile requirements.txt
soha@ubuntu:~/depi_r3/lec10/simple_flask_app$ touch Dockerfile
soha@ubuntu:~/depi_r3/lec10/simple_flask_app$ vim Dockerfile
soha@ubuntu:~/depi_r3/lec10/simple_flask_app$ git pull https://github.com/MoustafaRoushdy/simple_flask_app.git
remote: Enumerating objects: 1, done.
remote: Total 1 (delta 0), reused 0 (delta 0), pack-reused 1 (from 1)
Unpacking objects: 100% (1/1), 167 bytes | 167.00 KiB/s, done.
From https://github.com/MoustafaRoushdy/simple_flask_app
 * branch            HEAD       -> FETCH_HEAD
Updating 3fa60cd..2d15e30
Fast-forward
 requirements.txt | 2 +-
1 file changed, 1 insertion(+), 1 deletion(-)
```

Dockerfile:

```
soha@ubuntu: ~/depi_r3/lec10/simple_flask_app

FROM python:3.9.23-alpine3.22

COPY . .

RUN pip install -r requirements.txt

EXPOSE 5000

CMD ["python3","app.py"]

~
~
~
~
~
~
~
~
```

```
soha@ubuntu:~/depi_r3/lec10/simple_flask_app$ vim Dockerfile
soha@ubuntu:~/depi_r3/lec10/simple_flask_app$ docker build -t simple_flask_app:v0.3 .
[+] Building 8.3s (8/8) FINISHED                                docker:default
=> [internal] load build definition from Dockerfile              0.0s
=> => transferring dockerfile: 153B                             0.0s
=> [internal] load metadata for docker.io/library/python:3.9.23-alpine3.22 0.0s
=> [internal] load .dockerignore                                0.0s
=> => transferring context: 2B                                   0.0s
=> [internal] load build context                                0.0s
=> => transferring context: 2.41kB                              0.0s
=> CACHED [1/3] FROM docker.io/library/python:3.9.23-alpine3.22 0.0s
=> [2/3] COPY . .                                              0.0s
=> [3/3] RUN pip install -r requirements.txt                    7.9s
=> exporting to image                                           0.3s
=> => exporting layers                                          0.2s
=> => writing image sha256:2ccb21df8ba3ccbc119f7129d68a9a18ddec62224dc9cd9ed9d08d4c6263ca02 0.0s
=> => naming to docker.io/library/simple_flask_app:v0.3        0.0s
soha@ubuntu:~/depi_r3/lec10/simple_flask_app$ docker run -d --name app_flask1 -p 8080:5000 simple_flask_app
40579ae433b64f5af266dabbf13491a0d20b29917cd6773be4930da1aa9af37
soha@ubuntu:~/depi_r3/lec10/simple_flask_app$ docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS        PORTS          NAMES
soha@ubuntu:~/depi_r3/lec10/simple_flask_app$ docker container run -d --name app3 simple_flask_app
docker: Error response from daemon: Conflict. The container name "/app3" is already in use by container "81330b18c683b66f53688f73559ddb500b2b3ab41893b79a032001ecc22ba53". You have to remove (or rename) that container to be able to reuse th
at name.

Run 'docker run --help' for more information
soha@ubuntu:~/depi_r3/lec10/simple_flask_app$ docker run -d --name app3 simple_flask_app
docker: Error response from daemon: Conflict. The container name "/app3" is already in use by container "81330b18c683b66f53688f73559ddb500b2b3ab41893b79a032001ecc22ba53". You have to remove (or rename) that container to be able to reuse th
at name.

Run 'docker run --help' for more information
```

```
1 warning found (use docker --debug to expand):
 - JSONArgsRecommended: JSON arguments recommended for CMD to prevent unintended behavior related to OS signals (line 8)
soha@ubuntu:~/depi_r3/lec10/simple_flask_app$ docker run -d --name app1 -p 8080:5000 simple_flask_app
docker: Error response from daemon: Conflict. The container name "/app1" is already in use by container "828a3cc967fc880137d8c21c9f8837581be4e6935af17a018fe41888e3f8e9e". You have to remove (or rename) that container to be able to reuse th
at name.

Run 'docker run --help' for more information
soha@ubuntu:~/depi_r3/lec10/simple_flask_app$ docker run -d --name app2 -p 8080:5000 simple_flask_app
4ed48b58d18b3eded7a1f8cdc9225dd99aef2a557919bd1d5bef459ba591cc53
soha@ubuntu:~/depi_r3/lec10/simple_flask_app$ docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS        PORTS          NAMES
soha@ubuntu:~/depi_r3/lec10/simple_flask_app$ docker ps -a
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS        PORTS          NAMES
MES
4ed48b58d18b   simple_flask_app                    "/bin/sh -c 'python ..." 15 seconds ago Exited (2) 14 seconds ago ap
p2
828a3cc967fc   simple_flask_app                    "/bin/sh -c 'python ..." 6 minutes ago  Exited (2) 6 minutes ago ap
p1
1490f87eeca3   simple_flask_app                    "/bin/sh -c 'python ..." 10 minutes ago Exited (2) 10 minutes ago ne
rvous_joliot
c6a18a41895b   simple_flask_app                    "/bin/sh -c 'python ..." 12 minutes ago Exited (2) 12 minutes ago an
gry_cannon
926a6d622667   mariadb                              "docker-entrypoint.s..." 4 hours ago    Exited (0) 46 minutes ago so
ha2
ce3c361ad135   mariadb:latest                     "docker-entrypoint.s..." 5 hours ago    Exited (1) 5 hours ago yo
uthful_curran
d95539e5e3ed   mariadb                              "docker-entrypoint.s..." 5 hours ago    Exited (1) 5 hours ago bo
ring_khayyam
162a7ce147d7   mariadb:latest                     "docker-entrypoint.s..." 5 hours ago    Exited (1) 5 hours ago da
zzling_boud
```

```

Run 'docker run --help' for more information
soha@ubuntu:~/depi_r3/lec10/simple_flask_app$ docker run -d simple_flask_app:v0.3 .
c724f502003cf06541e801b7c904a245eee8aa72e2b5a76013a64c4d15ef1c3a
docker: Error response from daemon: failed to create task for container: failed to create shim task: OCI runtime create
failed: runc create failed: unable to start container process: error during container init: exec: ".": executable file not
found in $PATH: unknown

Run 'docker run --help' for more information
soha@ubuntu:~/depi_r3/lec10/simple_flask_app$ docker run -d simple_flask_app:v0.3
cd69e772461809f5a74b715f9e78cb267a71ee857cf77a500148deb3759c41e3
soha@ubuntu:~/depi_r3/lec10/simple_flask_app$ docker ps
CONTAINER ID   IMAGE                  COMMAND                  CREATED        STATUS        PORTS        NAMES
cd69e7724618   simple_flask_app:v0.3  "python3 app.py"        5 seconds ago  Up 5 seconds  5000/tcp     interesting_ptolemy
soha@ubuntu:~/depi_r3/lec10/simple_flask_app$ docker logs cd69e7724618
* Serving Flask app 'app'
* Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on all addresses (0.0.0.0)
* Running on http://127.0.0.1:5000
* Running on http://172.17.0.2:5000
Press CTRL+C to quit
soha@ubuntu:~/depi_r3/lec10/simple_flask_app$ docker run -d -p 8080:5000 simple_flask_app:v0.3
448db5e1d3adf82e931fa34bc8aba42229b8134955ff2a4fedf5355bad692d3b
soha@ubuntu:~/depi_r3/lec10/simple_flask_app$ docker logs cd69e7724618
* Serving Flask app 'app'
* Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on all addresses (0.0.0.0)
* Running on http://127.0.0.1:5000
* Running on http://172.17.0.2:5000
Press CTRL+C to quit
soha@ubuntu:~/depi_r3/lec10/simple_flask_app$

```

Localhost:



