```
ubuntu $ mkdir composeapp
ubuntu $ cd composeapp/
ubuntu $ nano app.py
ubuntu $
ubuntu $ nano app.py
ubuntu $ nano app.py
ubuntu $ nano requirements.txt
ubuntu $ nano Dockerfile
ubuntu $ sudo docker build -t marinoj/composeapp .
DEPRECATED: The legacy builder is deprecated and will be removed in a future rel
ease.
            Install the buildx component to build images with BuildKit:
            https://docs.docker.com/go/buildx/
Sending build context to Docker daemon 4.096kB
Error response from daemon: dockerfile parse error on line 5: ADD requires at le
ast two arguments, but only one was provided. Destination could not be determine
ubuntu $ nano Dockerfile
ubuntu $ sudo docker build -t marinoj/composeapp .
DEPRECATED: The legacy builder is deprecated and will be removed in a future rel
ease.
            Install the buildx component to build images with BuildKit:
            https://docs.docker.com/go/buildx/
Sending build context to Docker daemon 4.096kB
Step 1/6: FROM python:2.7
2.7: Pulling from library/python
7e2b2a5af8f6: Pull complete
09b6f03ffac4: Pull complete
dc3f0c679f0f: Pull complete
fd4b47407fc3: Pull complete
b32f6bf7d96d: Pull complete
6f4489a7e4cf: Pull complete
af4b99ad9ef0: Pull complete
39db@bc48c26: Pull complete
acb4a89489fc: Pull complete
Digest: sha256:cfa62318c459b1fde9e6841c619906d15ada5910d625176e24bf692cf8a2601d
Status: Downloaded newer image for python:2.7
 ---> 68e7be49c28c
Step 2/6 : LABEL maintainer mj@example.com
---> Running in 61ebd812f7cb
-tRemoving intermediate container 61ebd812f7cb
---> cfe3dd938ed2
Step 3/6: ENV REFRESHED AT 2024-03-15
---> Running in a9662583c19b
Removing intermediate container a9662583c19b
---> e883daf12db1
Step 4/6 : ADD . /composeapp
---> ce6e44fb9751
```

Step 5/6 : WORKDIR ./composeapp

```
Step 5/6: WCRKDIR ./composeapp
---> Running in 64f58a7ac93d
Removing intermediate container 64f58a7ac93d
 ---> e29c8fcc100e
Step 6/6: RUN pip install -r requirements.txt
---> Running in 11897f613fa2
marinDEPRECATION: Python 2.7 reached the end of its life on January 1st, 2020. P
lease upgrade your Python as Python 2.7 is no longer maintained. A future version of pip will drop support for Python 2.7. More details about Python 2 support in pip, can be found at https://pip.pypa.ic/en/latest/development/release-process/#python-2-support
cCollecting flask
 Downloading Flask-1.1.4-py2.py3-none-any.whl (94 kB)
Collecting redis
  Downloading redis-3.5.3-py2.py3-none-any.whl (72 kB)
Collecting click<8.0,>=5.1
  Downloading click-7.1.2-py2.py3-none-any.whl (82 kB)
Collecting Werkzeug<2.0,>=0.15
  Downloading Werkzeug-1.6.1-py2.py3-none-any.whl (298 kB)
Collecting Jinja2<3.0,>=2.10.1
  Downloading Jinja2-2.11.3-py2.py3-none-any.whl (125 kB)
Collecting itsdangerous<2.0,>=0.24
  Downloading itsdangerous-1.1.@-py2.py3-none-any.whl (16 kB)
Collecting MarkupSafe>=0.23
  Downloading MarkupSafe-1.1.1-cp27-cp27mu-manylinux1_x86_64.whl (24 kB)
Installing collected packages: click, Werkzeug, MarkupSafe, Jinja2, itsdangerous
, flask, redis
Successfully installed Jinja2-2.11.3 MarkupSafe-1.1.1 Werkzeug-1.0.1 click-7.1.2
flask-1.1.4 itsdangerous-1.1.0 redis-3.5.3
grade pip' command.
ccimRemoving intermediate container 11897f613fa2
---> 7c2fa3ff255f
Successfully built 7c2fa3ff255f
Successfully tagged marinoj/composeapp:latest
ubuntu $ sudo docker build -t marino/composeapp
DEPRECATED: The legacy builder is deprecated and will be removed in a future rel
ease.
             Install the buildx component to build images with BuildKit:
             https://docs.docker.com/go/buildx/
"docker build" requires exactly 1 argument.
See 'docker build --help'.
Usage: docker build [OPTIONS] PATH | URL | -
Build an image from a Dockerfile
```

```
ubuntu $ sudo docker build -t marino/composeapp .
DEPRECATED: The legacy builder is deprecated and will be removed in a future rel
            Install the buildx component to build images with BuildKit:
            https://docs.docker.com/go/buildx/
Sending build context to Docker daemon 4.096kB
Step 1/6: FROM python:2.7
---> 68e7be49c28c
Step 2/6 : LABEL maintainer mj@example.com
---> Using cache
---> cfe3dd938ed2
Step 3/6 : ENV REFRESHED_AT 2024-03-15
---> Using cache
 ---> e883daf12db1
Step 4/6 : ADD . /composeapp
---> Using cache
 ---> ce6e44fb9751
Step 5/6 : WORKDIR ./composeapp
---> Using cache
---> e29c8fcc100e
Step 6/6 : RUN pip install -r requirements.txt
---> Using cache
---> 7c2fa3ff255f
Successfully built 7c2fa3ff255f
Successfully tagged marino/composeapp:latest
ubuntu $ |
```

```
ubuntu $ sudo docker-compose up
Recreating composeapp web 1 ... done
Starting composeapp_redis_1 ... done
Attaching to composeapp_redis_1, composeapp_web_1
redis 1 | 1:C 15 Mar 2024 09:49:50.129 # WARNING Memory overcommit must be enab
led! Without it, a background save or replication may fail under low memory cond
ition. Being disabled, it can also cause failures without low memory condition,
see https://github.com/jemalloc/jemalloc/issues/1328. To fix this issue add 'vm.
overcommit memory = 1' to /etc/sysctl.conf and then reboot or run the command 's
ysctl vm.overcommit memory=1' for this to take effect.
redis 1 | 1:C 15 Mar 2024 09:49:50.129 * 000CoC0CoC0Co Redis is starting 000CoO
0000000
redis_1 | 1:C 15 Mar 2024 09:49:50.129 * Redis version=7.2.4, bits=64, commit=0
0000000, modified=0, pid=1, just started
redis_1 | 1:C 15 Mar 2024 09:49:50.129 # Warning: no config file specified, usi
ng the default config. In order to specify a config file use redis-server /path/
to/redis.conf
redis 1 | 1:M 15 Mar 2024 09:49:50.129 * monotonic clock: POSIX clock gettime
         1:M 15 Mar 2024 09:49:50.130 * Running mode=standalone, port=6379.
         1:M 15 Mar 2024 09:49:50.135 * Server initialized
redis 1 | 1:M 15 Mar 2024 09:49:50.135 * Loading RDB produced by version 7.2.4
redis_1 | 1:M 15 Mar 2024 09:49:50.135 * RDB age 39 seconds
redis_1 | 1:M 15 Mar 2024 09:49:50.135 * RDB memory usage when created 0.83 Mb
redis 1 | 1:M 15 Mar 2024 09:49:50.135 * Done loading RDB, keys loaded: 0, keys
expired: 6.
         1:M 15 Mar 2024 09:49:50.135 * DB loaded from disk: 0.000 seconds
         1:M 15 Mar 2024 09:49:50.135 * Ready to accept connections tcp
            * Serving Flask app "app" (lazy loading)
web 1
            * Environment: production
web_1
              WARNING: This is a development server. Do not use it in a producti
web 1
on deployment.
              Use a production WSGI server instead.
web 1
web_1
            * Debug mode: on
            * Running on http://0.0.0.0:5000/ (Press CTRL+C to quit)
web 1
           * Restarting with stat
web 1
web 1
            * Debugger is active!
           * Debugger PIN: 305-424-566
web 1
```

```
ubuntu $ sudo docker-compose up -d
Starting composeapp_redis_1 ... done
Starting composeapp_web_1 ... done
ubuntu $
```

```
ubuntu $ curl localhost:5000

Hello Docker book reader! I have been seen 1 timesubuntu $ curl localhost:5000

Hello Docker book reader! I have been seen 2 timesubuntu $ curl localhost:5000

Hello Docker book reader! I have been seen 3 timesubuntu $ curl localhost:5000

Hello Docker book reader! I have been seen 4 timesubuntu $ curl localhost:5000

Hello Docker book reader! I have been seen 5 timesubuntu $ curl localhost:5000

Hello Docker book reader! I have been seen 6 timesubuntu $ curl localhost:5000

Hello Docker book reader! I have been seen 7 timesubuntu $
```

```
ubuntu $ docker-compose ps
Name Command State Ports

composeapp_redis_1 docker-entrypcint.sh Up 6379/tcp
redis ...

composeapp_web_1 python app.py Up 6.0.0.0:5000->5000/tcp;
::5000->5000/tcp
```

```
ubuntu $ docker-compose stop
Stopping composeapp_web_1 ... done
Stopping composeapp_redis_1 ... done
ubuntu $
```

```
ubuntu $ docker-compose ps

Name
Command
State Ports

composeapp_redis_1 docker-entrypcint.sh redis ... Exit 0

composeapp_web_1 python app.py
Exit 0

ubuntu $
```

```
ubuntu $ docker-compose rm

Going to remove composeapp_web_1, composeapp_redis_1

Are you sure? [yN] y

Removing composeapp_web_1 ... done

Removing composeapp_redis_1 ... done

ubuntu $ docker-compose ps

Name Command State Ports

ubuntu $
```