

Task 1

step 1

In this task you are going to deploy Node Application using docker and docker compose. In

```
lycan@Lycan: ~  
e=mongo&tag=latest": dial unix /var/run/docker.sock: connect: permission denied  
lycan@Lycan:~$ sudo docker pull mongo  
[sudo] password for lycan:  
Using default tag: latest  
latest: Pulling from library/mongo  
Get "https://registry-1.docker.io/v2/library/mongo/manifests/sha256:e0b1614551474ee2f3c3ef7c9706b5e19f2107aa36b73c910522af9fa8eb756e": net/http: TLS handshake timeout  
lycan@Lycan:~$ sudo docker pull mongo  
Using default tag: latest  
latest: Pulling from library/mongo  
fb0b3276a519: Downloading 19.17MB/28.57MB  
c81bcd64a2d2: Download complete  
fb0b3276a519: Downloading 20.93MB/28.57MB  
06d1770a2c11: Download complete  
a03d917eab2f: Download complete  
ding 19.46MB/28.57MB  
d0226311fde3: Download complete  
cf22b9bccca1: Download complete  
5a4955b612fd: Downloading 4.307MB/193.6MB  
5a4955b612fd: Downloading 9.714MB/193.6MB
```



```
lycan@Lycan: ~  
5a4955b612fd: Pull complete  
bc8341d9c8d5: Pull complete  
Digest: sha256:2ca8fb22c9522b49fd1f5490dee3e7026a4331b9f904d5acf10a9638c1d1539d  
Status: Downloaded newer image for mongo:latest  
docker.io/library/mongo:latest  
lycan@Lycan:~$ sudo pull mongo-express  
sudo: pull: command not found  
lycan@Lycan:~$ sudo docker pull mongo-express  
Using default tag: latest  
latest: Pulling from library/mongo-express  
6a428f9f83b0: Pull complete  
f2b1fb32259e: Pull complete  
40888f2a0a1f: Pull complete  
4e3cc9ce09be: Pull complete  
eaa1898f3899: Pull complete  
ab4078090382: Pull complete  
ae780a42c79e: Pull complete  
e60224d64a04: Pull complete  
Digest: sha256:2a25aafdf23296823b06bc9a0a2af2656971262041b8dbf11b40444804fdc104  
Status: Downloaded newer image for mongo-express:latest  
docker.io/library/mongo-express:latest  
lycan@Lycan:~$
```

```
9559be35cdea  
lycan@Lycan:~$ sudo docker ps -a  
CONTAINER ID   IMAGE             COMMAND                  CREATED        STATUS  
PORTS          NAMES  
9559be35cdea   mongo-express    "tini -- /docker-ent..." 2 minutes ago Up 3 sec  
onds 8081/tcp      elegant_brown  
450163000f7b   mongo            "docker-entrypoint.s..." 8 minutes ago Up 3 min  
utes 27017/tcp    mongo  
lycan@Lycan:~$
```

```
lycan@Lycan: ~  
lycan@Lycan:~$ sudo docker network ls  
NETWORK ID          NAME                DRIVER              SCOPE  
80df79d474be        bridge             bridge              local  
f04f99316587        host               host                local  
d56f3998960b        mongo-network      bridge              local  
66982b902f28        none               null                local  
lycan@Lycan:~$ S
```

```
lycan@Lycan:~$ sudo docker run -d \  
> -p 8081:8081 \  
-e ME_CONFIG_MONGODB_ADMINUSERNAME=admin \  
-e ME_CONFIG_MONGODB_ADMINPASSWORD=password \  
-e ME_CONFIG_MONGODB_SERVER=mongodb \  
--net mongo-network \  
--name mongo-express \  
mongo-express  
ae2a8652854a0b07a4f67a96e817c5192815403b8b1682f4f874048eb40384c3
```

```
lycan@Lycan:~$ sudo docker run -d \  
> -p 8081:8081 \  
-e ME_CONFIG_MONGODB_ADMINUSERNAME=admin \  
-e ME_CONFIG_MONGODB_ADMINPASSWORD=password \  
-e ME_CONFIG_MONGODB_SERVER=mongodb \  
--net mongo-network \  
--name mongo-express \  
mongo-express  
ae2a8652854a0b07a4f67a96e817c5192815403b8b1682f4f874048eb40384c3
```

Databases		
<input type="text" value="Database Name"/>		<button>+ Create Database</button>
<div>View</div>	admin	<div>Del</div>
<div>View</div>	config	<div>Del</div>
<div>View</div>	local	<div>Del</div>

Server Status

Turn on admin in config.js to view server stats!

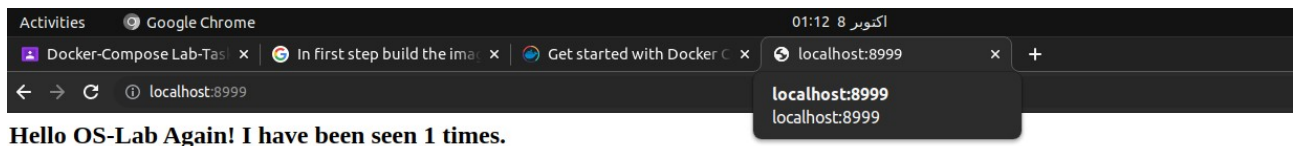
Task 2

Step 1

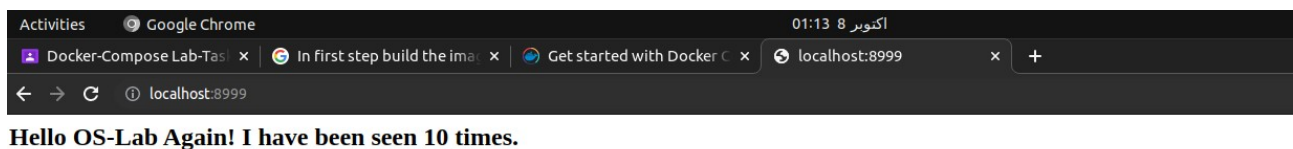
```
lycan@Lycan: ~/PythonApp/PythonApp
lycan@Lycan:~/PythonApp/PythonApp$ sudo apt install docker-compose
[sudo] password for lycan:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
 chromium-codecs-ffmpeg-extra gstreamer1.0-vaapi i965-va-driver
 intel-media-va-driver libaacs0 libaom3 libass9 libavcodec58 libavformat58
 libavutil56 libbdplus0 libblas3 libbluray2 libbs2b0 libchromaprint1
 libcodec2-1.0 libdav1d5 libflite1 libgme0 libgsm1
 libgstreamer-plugins-bad1.0-0 libigdgmm12 liblilv-0-0 libmfx1 libmysofa1
 libnorm1 libopenmpt0 libpgm-5.3-0 libpostproc55 librabbitmq4 librubberband2
 libserd-0-0 libshine3 libsnappy1v5 libsord-0-0 libsratom-0-0
 libstrt1.4-gnutls libssh-gcrypt-4 libswresample3 libswscale5 libudfread0
 libva-drm2 libva-wayland2 libva-x11-2 libva2 libvdpau1 libvidstab1.1
 libx265-199 libxvidcore4 libzimg2 libzmq5 libzvbi-common libzvbi0
 mesa-va-drivers mesa-va-drivers-pocketsphinx-en-us va-driver-all
 vdpau-driver-all
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
 python3-attr python3-distutils python3-docker python3-dockerpty
 python3-docopt python3-dotenv python3-jsonschema python3-pyrsistent
 python3-setuptools python3-texttable python3-websocket
Suggested packages:
```

```
lycan@Lycan: ~/PythonApp/PythonApp
lycan@Lycan:~/PythonApp/PythonApp$ sudo docker-compose build
redis uses an image, skipping
Building web
Sending build context to Docker daemon 5.632kB
Step 1/9 : FROM python:3.7-alpine
3.7-alpine: Pulling from library/python
213ec9aee27d: Pull complete
47858aee13bf: Pull complete
113ca94c5cd3: Pull complete
ffab80633611: Pull complete
3f2330d53d99: Pull complete
Digest: sha256:5d50c235598f857e699019710ea765fd2e13d5472b03e6be427761f074ed3837
Status: Downloaded newer image for python:3.7-alpine
--> 529e7df2a3e0
Step 2/9 : WORKDIR /code
--> Running in 40f5886766ff
Removing intermediate container 40f5886766ff
--> 0a65fadf269a
Step 3/9 : ENV FLASK_APP app.py
--> Running in a8eaf50b2194
Removing intermediate container a8eaf50b2194
--> b92b517fe333
Step 4/9 : ENV FLASK_RUN_HOST 0.0.0.0
--> Running in c02bbd2d5135
```

```
lycan@Lycan: ~/PythonApp/PythonApp
lycan@Lycan:~/PythonApp/PythonApp$ sudo docker-compose up
Creating network "pythonapp_default" with the default driver
Pulling redis (redis:alpine)...
alpine: Pulling from library/redis
213ec9aee27d: Already exists
fb541f77610a: Pull complete
dc2e3041aaa5: Pull complete
aadae582a31f: Pull complete
996b5def1876: Pull complete
bed3be2507e6: Pull complete
Digest: sha256:2110a3ac510a3baa91881f268d5b8f411187eb42f94b8cd433cc5937251c7d96
Status: Downloaded newer image for redis:alpine
Creating pythonapp_redis_1 ... done
Creating pythonapp_web_1 ... done
Attaching to pythonapp_redis_1, pythonapp_web_1
redis_1 | 1:C 07 Oct 2022 20:08:36.547 # o000o000o000o Redis is starting o000o0
00o000o
redis_1 | 1:C 07 Oct 2022 20:08:36.547 # Redis version=7.0.5, bits=64, commit=0
0000000, modified=0, pid=1, just started
redis_1 | 1:C 07 Oct 2022 20:08:36.547 # 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 07 Oct 2022 20:08:36.547 * monotonic clock: POSIX clock_gettime
redis_1 | 1:M 07 Oct 2022 20:08:36.548 * Running mode=standalone, port=6379.
```



Step 2



```
[1]+  Stopped                  sudo docker-compose up
lycan@Lycan:~/PythonApp/PythonApp$ sudo docker ps -a
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS              PORTS                               NAMES
814e02a5ede2   redis:alpine   "docker-entrypoint.s..." 7 minutes ago  Exited (0) 12 seconds ago                                     pythonapp_redis_1
47a48a3e9d1a   pythonapp_web  "flask run"               7 minutes ago  Exited (137) 2 seconds ago                                     pythonapp_web_1
ae2a8652854a   mongo-express  "tini -- /docker-ent..." 2 hours ago    Up 2 hours          0.0.0.0:8081->8081/tcp, :::8081->8081/tcp  mongo-express
6d017c1938ec   mongo         "docker-entrypoint.s..." 2 hours ago    Up 2 hours          0.0.0.0:27017->27017/tcp, :::27017->27017/tcp  mongodb
9559be35cdea   mongo-express  "tini -- /docker-ent..." 2 hours ago    Exited (0) 2 hours ago                                     elegant_brown
450163000f7b   mongo         "docker-entrypoint.s..." 2 hours ago    Up 2 hours          27017/tcp                               mongo
lycan@Lycan:~/PythonApp/PythonApp$
```