
ASSIGNMENT NAME	: DOCKER
ASSIGNMENT NO.	:
BRANCH	: BE-COMP
NAME	:
ROLL NO.	:

```
root@de8489c1993a: /
student@B04L03100:~$ sudo docker pull ubuntu
[sudo] password for student:
Using default tag: latest
latest: Pulling from library/ubuntu
faecf96fd5ab: Pull complete
995977506e98: Pull complete
efb63fb8dcb6: Pull complete
a3ed95caeb02: Pull complete
Digest: sha256:7eb6ad74ec4f56ac194d8760063c88ca362f05a9038f2bc4f09a51849a4a53
Status: Downloaded newer image for ubuntu:latest
student@B04L03100:~$ sudo docker run -it ubuntu
root@de8489c1993a:/# sudo apt-get update
Ign http://archive.ubuntu.com trusty InRelease
Get:1 http://archive.ubuntu.com trusty-updates InRelease [65.9 kB]
Get:2 http://archive.ubuntu.com trusty-security InRelease [65.9 kB]
Hit http://archive.ubuntu.com trusty Release.gpg
Get:3 http://archive.ubuntu.com trusty-updates/main Sources [331 kB]
Get:4 http://archive.ubuntu.com trusty-updates/restricted Sources [5217 B]
Get:5 http://archive.ubuntu.com trusty-updates/universe Sources [190 kB]
Get:6 http://archive.ubuntu.com trusty-updates/main amd64 Packages [918 kB]
Get:7 http://archive.ubuntu.com trusty-updates/restricted amd64 Packages [23.5 kB]
Get:8 http://archive.ubuntu.com trusty-updates/universe amd64 Packages [440 kB]
Hit http://archive.ubuntu.com trusty Release
Get:9 http://archive.ubuntu.com trusty-security/main Sources [137 kB]
Get:10 http://archive.ubuntu.com trusty-security/restricted Sources [3920 B]
Get:11 http://archive.ubuntu.com trusty-security/universe Sources [39.1 kB]
Get:12 http://archive.ubuntu.com trusty-security/main amd64 Packages [550 kB]
Get:13 http://archive.ubuntu.com trusty-security/restricted amd64 Packages [20.2 kB]
Get:14 http://archive.ubuntu.com trusty-security/universe amd64 Packages [162 kB]
Get:15 http://archive.ubuntu.com trusty/main Sources [1335 kB]
Get:16 http://archive.ubuntu.com trusty/restricted Sources [5335 B]
Get:17 http://archive.ubuntu.com trusty/universe Sources [7926 kB]
Get:18 http://archive.ubuntu.com trusty/main amd64 Packages [1743 kB]
Get:19 http://archive.ubuntu.com trusty/restricted amd64 Packages [16.0 kB]
Get:20 http://archive.ubuntu.com trusty/universe amd64 Packages [7589 kB]
Fetched 21.6 MB in 13s (1658 kB/s)
Reading package lists... Done
root@de8489c1993a:/# sudo apt-get install python2.7
Reading package lists... Done
Building dependency tree
```

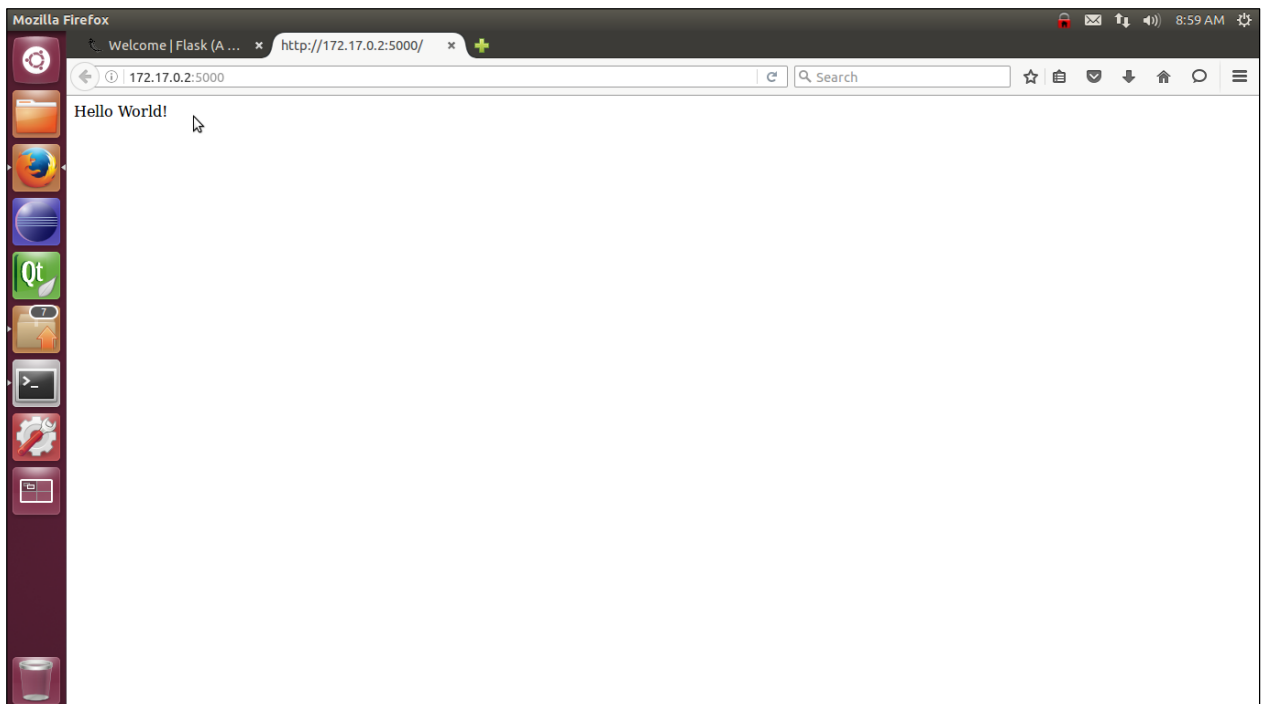
```
root@de8489c1993a: /
GNU nano 2.2.6 File: server.py Modified
from flask import Flask
app = Flask(__name__)

@app.route("/")
def hello():
    return "Hello World!"

if __name__ == "__main__":
    app.run(host='172.17.0.1', debug=True)
```

Get Help WriteOut Read File Prev Page Cut Text Cur Pos
Exit Justify Where Is Next Page UnCut Text To Spell

```
root@5f2c9f620f2e: /
run_simple(host, port, self, **options)
File "/usr/local/lib/python2.7/dist-packages/werkzeug/serving.py", line 674, in run_simple
s.bind((hostname, port))
File "/usr/lib/python2.7/socket.py", line 224, in meth
return getattr(self._sock,name)(*args)
socket.error: [Errno 99] Cannot assign requested address
root@de8489c1993a:/# nano server.py
root@de8489c1993a:/# nano server.py
root@de8489c1993a:/# python server.py
* Running on http://172.17.0.2:5000/ (Press CTRL+C to quit)
* Restarting with stat
* Debugger is active!
* Debugger pin code: 818-054-806
172.17.0.1 - - [18/Mar/2016 03:29:32] "GET / HTTP/1.1" 200 -
172.17.0.1 - - [18/Mar/2016 03:29:32] "GET /favicon.ico HTTP/1.1" 404 -
172.17.0.1 - - [18/Mar/2016 03:30:04] "GET / HTTP/1.1" 200 -
172.17.0.1 - - [18/Mar/2016 03:30:04] "GET /favicon.ico HTTP/1.1" 404 -
172.17.0.1 - - [18/Mar/2016 03:30:04] "GET /favicon.ico HTTP/1.1" 404 -
^Z
[2]+  Stopped                  python server.py
root@de8489c1993a:/# sudo docker ps -l
sudo: docker: command not found
root@de8489c1993a:/# student@B04L03100:~$ sudo docker ps -l
[sudo] password for student:
CONTAINER ID        IMAGE               COMMAND             CREATED             STATUS              PORTS              NAMES
de8489c1993a        ubuntu              "/bin/bash"         16 minutes ago      Up 16 minutes      0.0.0.0:80->80      tender_kilby
student@B04L03100:~$ sudo docker commit de8489c1993a mitpune
sha256:699bd08381ad418426a81d8528034fe3f2fe47605099756303af8473839ac8b8
student@B04L03100:~$ sudo docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
mitpune              latest              699bd08381ad       16 seconds ago     362.2 MB
ubuntu               latest              a0d4a44ae66e       2 days ago         188 MB
python               latest              5c84ff6992bc       9 days ago         689.6 MB
hello-world          latest              690ed74de00f       5 months ago       960 B
sequenceiq/hadoop-docker 2.7.0              789fa0a31911       10 months ago      1.76 GB
student@B04L03100:~$ sudo docker run -it mitpune
root@e781067ba91c:/# exit
exit
student@B04L03100:~$ sudo docker run -it mitpune
root@5f2c9f620f2e:/# nano server.py
root@5f2c9f620f2e:/#
```



```
student@B04L03100: ~  
Hit http://in.archive.ubuntu.com precise-backports/multiverse Translation-en  
Hit http://in.archive.ubuntu.com precise-backports/restricted Translation-en  
Hit http://in.archive.ubuntu.com precise-backports/universe Translation-en  
Ign http://downloads-distrow.mongodb.org dist/10gen Translation-en  
Ign http://www.remastersys.com precise/main amd64 Packages/DiffIndex  
Ign http://www.remastersys.com precise/main i386 Packages/DiffIndex  
Ign http://www.remastersys.com precise/main TranslationIndex  
Err http://www.remastersys.com precise/main amd64 Packages  
404 Not Found  
Err http://www.remastersys.com precise/main i386 Packages  
404 Not Found  
100% [Waiting for headers]^Cstudent@B04L03100:~$  
student@B04L03100:~$ sudo nano /etc/apt/sources.list.d/docker.list  
student@B04L03100:~$ sudo apt-get update  
E: Type 'https://apt.dockerproject.org/repo' is not known on line 1 in source list /etc/apt/sources.list.d/docker.list  
E: The list of sources could not be read.  
student@B04L03100:~$ sudo nano /etc/apt/sources.list.d/docker.list  
student@B04L03100:~$ sudo apt-get update  
Hit http://extras.ubuntu.com precise Release.gpg  
Ign http://ppa.launchpad.net precise Release.gpg  
Get:1 http://security.ubuntu.com precise-security Release.gpg [198 B]  
Hit http://extras.ubuntu.com precise Release  
Ign http://ppa.launchpad.net precise Release  
Get:2 http://security.ubuntu.com precise-security Release [54.3 kB]  
Hit http://in.archive.ubuntu.com precise Release.gpg  
Get:3 http://in.archive.ubuntu.com precise-updates Release.gpg [198 B]  
Hit http://in.archive.ubuntu.com precise-backports Release.gpg  
Hit http://extras.ubuntu.com precise/main Sources  
Hit http://downloads-distrow.mongodb.org dist Release.gpg  
Get:4 https://apt.dockerproject.org ubuntu-precise Release.gpg [801 B]  
Ign http://ppa.launchpad.net precise/main TranslationIndex  
Hit http://in.archive.ubuntu.com precise Release  
Get:5 http://in.archive.ubuntu.com precise-updates Release [196 kB]  
Hit http://extras.ubuntu.com precise/main amd64 Packages  
Hit http://extras.ubuntu.com precise/main i386 Packages  
Ign http://extras.ubuntu.com precise/main TranslationIndex  
Get:6 https://apt.dockerproject.org ubuntu-precise Release [19.7 kB]  
Ign https://apt.dockerproject.org ubuntu-precise Release  
Get:7 http://security.ubuntu.com precise-security/main Sources [138 kB]  
Get:8 https://apt.dockerproject.org ubuntu-precise/main amd64 Packages [3,305 B]  
Get:9 https://apt.dockerproject.org ubuntu-precise/main i386 Packages [28 B]
```

```
student@B04L03100: ~  
Get:9 https://apt.dockerproject.org ubuntu-precise/main i386 Packages [28 B]  
Get:10 http://security.ubuntu.com precise-security/restricted Sources [4,476 B]  
Get:11 http://security.ubuntu.com precise-security/universe Sources [45.1 kB]  
Get:12 http://security.ubuntu.com precise-security/multiverse Sources [2,201 B]  
Get:13 http://security.ubuntu.com precise-security/main amd64 Packages [578 kB]  
Hit http://downloads-distrow.mongodb.org dist Release  
Get:14 https://apt.dockerproject.org ubuntu-precise/main TranslationIndex [454 B]  
Ign https://apt.dockerproject.org ubuntu-precise/main TranslationIndex  
Get:15 http://security.ubuntu.com precise-security/restricted amd64 Packages [11.6 kB]  
Get:16 http://security.ubuntu.com precise-security/universe amd64 Packages [128 kB]  
Get:17 http://security.ubuntu.com precise-security/multiverse amd64 Packages [2,699 B]  
Get:18 http://security.ubuntu.com precise-security/main i386 Packages [637 kB]  
Get:19 http://security.ubuntu.com precise-security/restricted i386 Packages [11.6 kB]  
Get:20 http://security.ubuntu.com precise-security/universe i386 Packages [136 kB]  
Err http://ppa.launchpad.net precise/main Sources  
404 Not Found  
Err http://ppa.launchpad.net precise/main amd64 Packages  
404 Not Found  
Err http://ppa.launchpad.net precise/main i386 Packages  
404 Not Found  
Get:21 http://security.ubuntu.com precise-security/multiverse i386 Packages [2,875 B]  
Hit http://security.ubuntu.com precise-security/main TranslationIndex  
Hit http://security.ubuntu.com precise-security/multiverse TranslationIndex  
Hit http://security.ubuntu.com precise-security/restricted TranslationIndex  
Hit http://security.ubuntu.com precise-security/universe TranslationIndex  
Hit http://downloads-distrow.mongodb.org dist/10gen amd64 Packages  
Hit http://security.ubuntu.com precise-security/main Translation-en  
Hit http://security.ubuntu.com precise-security/multiverse Translation-en  
Hit http://security.ubuntu.com precise-security/restricted Translation-en  
Hit http://in.archive.ubuntu.com precise-backports Release  
Ign http://extras.ubuntu.com precise/main Translation-en_IN  
Hit http://security.ubuntu.com precise-security/universe Translation-en  
Ign http://ppa.launchpad.net precise/main Translation-en_IN  
Ign http://extras.ubuntu.com precise/main Translation-en  
Hit http://in.archive.ubuntu.com precise/main Sources  
Hit http://in.archive.ubuntu.com precise/restricted Sources  
Hit http://in.archive.ubuntu.com precise/universe Sources  
Hit http://in.archive.ubuntu.com precise/multiverse Sources  
Hit http://in.archive.ubuntu.com precise/main amd64 Packages  
Hit http://in.archive.ubuntu.com precise/restricted amd64 Packages  
Hit http://in.archive.ubuntu.com precise/universe amd64 Packages
```

```
student@B04L03100: ~  
Hit http://in.archive.ubuntu.com precise/restricted Sources  
Hit http://in.archive.ubuntu.com precise/universe Sources  
Hit http://in.archive.ubuntu.com precise/multiverse Sources  
Hit http://in.archive.ubuntu.com precise/main amd64 Packages  
Hit http://in.archive.ubuntu.com precise/restricted amd64 Packages  
Hit http://in.archive.ubuntu.com precise/universe amd64 Packages  
Hit http://in.archive.ubuntu.com precise/multiverse amd64 Packages  
Hit http://in.archive.ubuntu.com precise/main i386 Packages  
Hit http://in.archive.ubuntu.com precise/restricted i386 Packages  
Ign http://ppa.launchpad.net precise/main Translation-en  
Hit http://downloads-distrow.mongodb.org dist/10gen i386 Packages  
Hit http://in.archive.ubuntu.com precise/universe i386 Packages  
Hit http://in.archive.ubuntu.com precise/multiverse i386 Packages  
Hit http://in.archive.ubuntu.com precise/main TranslationIndex  
Hit http://in.archive.ubuntu.com precise/multiverse TranslationIndex  
Hit http://in.archive.ubuntu.com precise/restricted TranslationIndex  
Hit http://in.archive.ubuntu.com precise/universe TranslationIndex  
Ign http://www.remastersys.com precise Release.gpg  
Get:22 http://in.archive.ubuntu.com precise-updates/main Sources [495 kB]  
Ign http://downloads-distrow.mongodb.org dist/10gen TranslationIndex  
Get:23 http://in.archive.ubuntu.com precise-updates/restricted Sources [8,708 B]  
Get:24 http://in.archive.ubuntu.com precise-updates/universe Sources [124 kB]  
Get:25 http://in.archive.ubuntu.com precise-updates/multiverse Sources [9,759 B]  
Get:26 http://in.archive.ubuntu.com precise-updates/main amd64 Packages [967 kB]  
Get:27 http://in.archive.ubuntu.com precise-updates/restricted amd64 Packages [16.2 kB]  
Get:28 http://in.archive.ubuntu.com precise-updates/universe amd64 Packages [272 kB]  
Ign https://apt.dockerproject.org ubuntu-precise/main Translation-en_IN  
Get:29 http://in.archive.ubuntu.com precise-updates/multiverse amd64 Packages [16.6 kB]  
Get:30 http://in.archive.ubuntu.com precise-updates/main i386 Packages [1,026 kB]  
Ign https://apt.dockerproject.org ubuntu-precise/main Translation-en  
Ign http://www.remastersys.com precise Release  
Ign http://www.remastersys.com precise/main amd64 Packages/DiffIndex  
Get:31 http://in.archive.ubuntu.com precise-updates/restricted i386 Packages [16.1 kB]  
Get:32 http://in.archive.ubuntu.com precise-updates/universe i386 Packages [281 kB]  
Get:33 http://in.archive.ubuntu.com precise-updates/multiverse i386 Packages [16.7 kB]  
Hit http://in.archive.ubuntu.com precise-updates/main TranslationIndex  
Hit http://in.archive.ubuntu.com precise-updates/multiverse TranslationIndex  
Hit http://in.archive.ubuntu.com precise-updates/restricted TranslationIndex  
Hit http://in.archive.ubuntu.com precise-updates/universe TranslationIndex  
Hit http://in.archive.ubuntu.com precise-backports/main Sources  
Hit http://in.archive.ubuntu.com precise-backports/restricted Sources
```

```
student@B04L03100: ~  
Hit http://downloads-distrow.mongodb.org dist/10gen amd64 Packages  
Hit http://security.ubuntu.com precise-security/main Translation-en  
Hit http://security.ubuntu.com precise-security/multiverse Translation-en  
Hit http://security.ubuntu.com precise-security/restricted Translation-en  
Hit http://in.archive.ubuntu.com precise-backports Release  
Ign http://extras.ubuntu.com precise/main Translation-en_IN  
Hit http://security.ubuntu.com precise-security/universe Translation-en  
Ign http://ppa.launchpad.net precise/main Translation-en_IN  
Ign http://extras.ubuntu.com precise/main Translation-en  
Hit http://in.archive.ubuntu.com precise/main Sources  
Hit http://in.archive.ubuntu.com precise/restricted Sources  
Hit http://in.archive.ubuntu.com precise/universe Sources  
Hit http://in.archive.ubuntu.com precise/multiverse Sources  
Hit http://in.archive.ubuntu.com precise/main amd64 Packages  
Hit http://in.archive.ubuntu.com precise/restricted amd64 Packages  
Hit http://in.archive.ubuntu.com precise/universe amd64 Packages  
Hit http://in.archive.ubuntu.com precise/multiverse amd64 Packages  
Hit http://in.archive.ubuntu.com precise/main i386 Packages  
Hit http://in.archive.ubuntu.com precise/restricted i386 Packages  
Ign http://ppa.launchpad.net precise/main Translation-en  
Hit http://downloads-distrow.mongodb.org dist/10gen i386 Packages  
Hit http://in.archive.ubuntu.com precise/universe i386 Packages  
Hit http://in.archive.ubuntu.com precise/multiverse i386 Packages  
Hit http://in.archive.ubuntu.com precise/main TranslationIndex  
Hit http://in.archive.ubuntu.com precise/multiverse TranslationIndex  
Hit http://in.archive.ubuntu.com precise/restricted TranslationIndex  
Hit http://in.archive.ubuntu.com precise/universe TranslationIndex  
Ign http://www.remastersys.com precise Release.gpg  
Get:22 http://in.archive.ubuntu.com precise-updates/main Sources [495 kB]  
Ign http://downloads-distrow.mongodb.org dist/10gen TranslationIndex  
Get:23 http://in.archive.ubuntu.com precise-updates/restricted Sources [8,708 B]  
Get:24 http://in.archive.ubuntu.com precise-updates/universe Sources [124 kB]  
Get:25 http://in.archive.ubuntu.com precise-updates/multiverse Sources [9,759 B]  
Get:26 http://in.archive.ubuntu.com precise-updates/main amd64 Packages [967 kB]  
Get:27 http://in.archive.ubuntu.com precise-updates/restricted amd64 Packages [16.2 kB]  
Get:28 http://in.archive.ubuntu.com precise-updates/universe amd64 Packages [272 kB]  
Ign https://apt.dockerproject.org ubuntu-precise/main Translation-en_IN  
Get:29 http://in.archive.ubuntu.com precise-updates/multiverse amd64 Packages [16.6 kB]  
Get:30 http://in.archive.ubuntu.com precise-updates/main i386 Packages [1,026 kB]  
Ign https://apt.dockerproject.org ubuntu-precise/main Translation-en  
Ign http://www.remastersys.com precise Release
```

```
student@B04L03100: ~  
Error pulling image (latest) from docker.io/sequenceiq/hadoop-docker, Untar re-exec error: exit status 1: output: unexpected EOF  
student@B04L03100:~$ sudo docker run -it sequenceiq/hadoop-docker:2.7.0 /etc/bootstrap.sh -bash  
/  
Starting sshd: [ OK ]  
Starting namenodes on [bcd3ec0197b3]  
bcd3ec0197b3: starting namenode, logging to /usr/local/hadoop/logs/hadoop-root-namenode-bcd3ec0197b3.out  
localhost: starting datanode, logging to /usr/local/hadoop/logs/hadoop-root-datanode-bcd3ec0197b3.out  
Starting secondary namenodes [0.0.0.0]  
0.0.0.0: starting secondarynamenode, logging to /usr/local/hadoop/logs/hadoop-root-secondarynamenode-bcd3ec0197b3.out  
starting yarn daemons  
starting resourcemanager, logging to /usr/local/hadoop/logs/yarn--resourcemanager-bcd3ec0197b3.out  
localhost: starting nodemanager, logging to /usr/local/hadoop/logs/yarn-root-nodemanager-bcd3ec0197b3.out  
bash-4.1# ifconfig  
eth0  
    Link encap:Ethernet  HWaddr 02:42:AC:11:00:02  
    inet addr:172.17.0.2  Bcast:0.0.0.0  Mask:255.255.0.0  
    inet6 addr: fe80::42:acff:fe11:2/64 Scope:Link  
    UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1  
    RX packets:76 errors:0 dropped:0 overruns:0 frame:0  
    TX packets:27 errors:0 dropped:0 overruns:0 carrier:0  
    collisions:0 txqueuelen:0  
    RX bytes:13225 (12.9 KiB)  TX bytes:2092 (2.0 KiB)  
  
lo  
    Link encap:Local Loopback  
    inet addr:127.0.0.1  Mask:255.0.0.0  
    inet6 addr: ::1/128 Scope:Host  
    UP LOOPBACK RUNNING  MTU:65536  Metric:1  
    RX packets:276 errors:0 dropped:0 overruns:0 frame:0  
    TX packets:276 errors:0 dropped:0 overruns:0 carrier:0  
    collisions:0 txqueuelen:0  
    RX bytes:48774 (47.6 KiB)  TX bytes:48774 (47.6 KiB)  
  
bash-4.1# ^C  
bash-4.1# ^C  
bash-4.1# jps  
408 SecondaryNameNode  
655 NodeManager  
248 DataNode  
560 ResourceManager  
128 NameNode  
960 Jps  
bash-4.1#
```