A Narendiran
PES1UG19CS001
LAB 2

1a.png

```
❯ docker run hello-world

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
 1. The Docker client contacted the Docker daemon.
 2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
    (arm64v8)
 3. The Docker daemon created a new container from that image which runs the
    executable that produces the output you are currently reading.
 4. The Docker daemon streamed that output to the Docker client, which sent it
    to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
 $ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
 https://hub.docker.com/

For more examples and ideas, visit:
 https://docs.docker.com/get-started/
```

2a.png

```
❯ docker images
REPOSITORY          TAG        IMAGE ID        CREATED         SIZE
python              latest     fc580556154f    13 days ago     864MB
mongo               latest     c872a4342187    2 weeks ago     663MB
ubuntu              20.04      a457a74c9aaa    2 weeks ago     65.6MB
adithya1/nodeapp    latest     447d48516f6d    3 weeks ago     22.4MB
hello-world         latest     18e5af790473    5 months ago    9.14kB
adithya1/nodeapp    <none>     59ce1ef65b50    7 months ago    323MB
```

2b.png

```
> docker run cprogram
Running this inside a container !
My SRN is PES1UG19CS001
```

2c.png

Using 0 of 1 private repositories. Get more

General   Tags   Builds   Collaborators   Webhooks   Settings

ⓘ **Advanced Image Management**
View all your images and tags in this repository, clean up unused content, recover untagged images. Available with Pro, Team and Business subscriptions.

View preview

🌐 naren951 / **cprogram**

This repository does not have a description ✏

🕐 Last pushed: 2 minutes ago

Docker commands

Public View

To push a new tag to this repository,

```
docker push naren951/cprogram:tagname
```

Tags and Scans

This repository contains 1 tag(s).

🛡 VULNERABILITY SCANNING - **DISABLED**
Enable

TAG	OS	PULLED	PUSHED
● latest	🐧	2 minutes ago	2 minutes ago

See all

Automated Builds

Manually pushing images to Hub? Connect your account to GitHub or Bitbucket to automatically build and tag new images whenever your code is updated, so you can focus your time on creating.

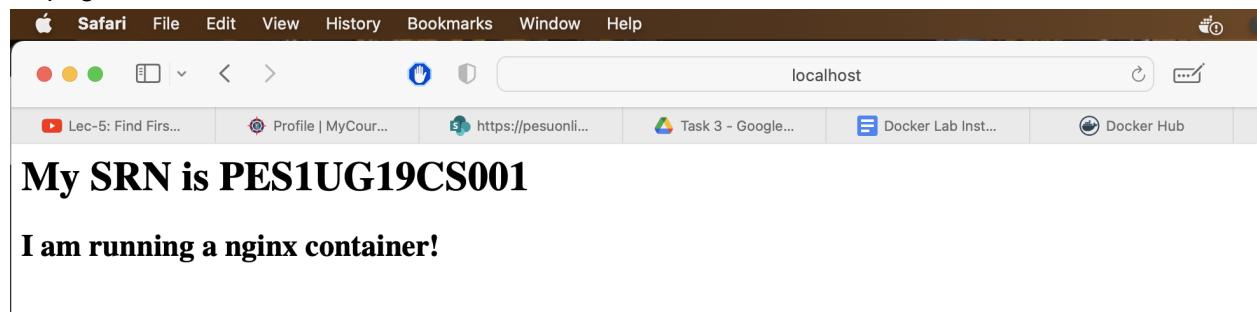Available with Pro, Team and Business subscriptions.

Upgrade to Pro   Learn more

3a.png

```
> docker run -p 80:80 server
/docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration
/docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
/docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf
10-listen-on-ipv6-by-default.sh: info: Enabled listen on IPv6 in /etc/nginx/conf.d/default.conf
/docker-entrypoint.sh: Launching /docker-entrypoint.d/20-envsubst-on-templates.sh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/30-tune-worker-processes.sh
/docker-entrypoint.sh: Configuration complete; ready for start up
2022/02/21 06:26:57 [notice] 1#1: using the "epoll" event method
2022/02/21 06:26:57 [notice] 1#1: nginx/1.21.6
2022/02/21 06:26:57 [notice] 1#1: built by gcc 10.2.1 20210110 (Debian 10.2.1-6)
2022/02/21 06:26:57 [notice] 1#1: OS: Linux 5.10.25-linuxkit
2022/02/21 06:26:57 [notice] 1#1: getrlimit(RLIMIT_NOFILE): 1048576:1048576
2022/02/21 06:26:57 [notice] 1#1: start worker processes
2022/02/21 06:26:57 [notice] 1#1: start worker process 32
2022/02/21 06:26:57 [notice] 1#1: start worker process 33
2022/02/21 06:26:57 [notice] 1#1: start worker process 34
2022/02/21 06:26:57 [notice] 1#1: start worker process 35
```

3b.png

localhost

▶️ Lec-5: Find Firs... | 🎯 Profile | MyCour... | 📗 https://pesuonli... | 📁 Task 3 - Google... | 📄 Docker Lab Inst... | 🐳 Docker Hub

My SRN is PES1UG19CS001

I am running a nginx container!

3c.png

```
❯ docker run -dp 27017:27017 mongo

730e8b147377aba664826f19f1d7510573490b55e42e5b9e0038a4f76897d79d
❯ docker run pymongo
Inserted into the MongoDB database!
Fecthed from MongoDB: {'_id': ObjectId('6213363a611abc4c7bd0174a'), 'Name:': 'A Narendiran', 'SRN': 'PES1UG19CS001'}
❯ docker ps
CONTAINER ID    IMAGE      COMMAND           CREATED         STATUS          PORTS
    NAMES
730e8b147377    mongo      "docker-entrypoint.s…"   6 seconds ago   Up 5 seconds    0.0.0.0:27017->27017/tcp, :::27017->27017/tcp
    serene_bhabha
```

3d.png

```
❯ docker network create my-bridge-network

2c5e301f7b88b03ab512bef0ba23bb38c97f0e2ffb4942631afc614dd1ea7f5e
❯ docker run -dp 27017:27017 --network=my-bridge-network --name=mongodb mongo:latest

bcc85500d02cdfd18b383f2c1792b7bf75669ecad25bbcbb44ca15ecfd5d12a1
❯ docker ps
CONTAINER ID    IMAGE          COMMAND           CREATED         STATUS          PORTS
        NAMES
bcc85500d02c    mongo:latest   "docker-entrypoint.s…"   4 seconds ago   Up 3 seconds    0.0.0.0:27017->27017/tcp, :::27017->2701
/tcp    mongodb
```

3e.png

```
❯ docker run --network=my-bridge-network pymongo
Inserted into the MongoDB database!
Fecthed from MongoDB: {'_id': ObjectId('6213374494ab8495f0257aac'), 'Name:': 'A Narendiran', 'SRN': 'PES1UG19CS001'}
```

4a.png

```
e ": Linux", name": Linux", architecture": aarch64", version": 5.10.25-linuxkit"}, platform": CPython 3.10.2.final.0 }}}
mongodb_1  | {"t":{"$date":"2022-02-21T07:05:05.215+00:00"},"s":"I",  "c":"NETWORK",  "id":22943,  "ctx":"listener","msg":"Co
nection accepted","attr":{"remote":"172.21.0.3:33466","uuid":"0fd642cb-2084-438c-aeff-84d445578d15","connectionId":2,"connecti
nCount":2}}
mongodb_1  | {"t":{"$date":"2022-02-21T07:05:05.215+00:00"},"s":"I",  "c":"NETWORK",  "id":22943,  "ctx":"listener","msg":"Co
nection accepted","attr":{"remote":"172.21.0.3:33468","uuid":"beabf61e-595b-4a9f-8f77-1fd837f9bd8a","connectionId":3,"connecti
nCount":3}}
mongodb_1  | {"t":{"$date":"2022-02-21T07:05:05.215+00:00"},"s":"I",  "c":"NETWORK",  "id":51800,  "ctx":"conn2","msg":"clien
 metadata","attr":{"remote":"172.21.0.3:33466","client":"conn2","doc":{"driver":{"name":"PyMongo","version":"4.0.1"},"os":{"ty
e":"Linux","name":"Linux","architecture":"aarch64","version":"5.10.25-linuxkit"},"platform":"CPython 3.10.2.final.0"}}}
mongodb_1  | {"t":{"$date":"2022-02-21T07:05:05.216+00:00"},"s":"I",  "c":"NETWORK",  "id":51800,  "ctx":"conn3","msg":"clien
 metadata","attr":{"remote":"172.21.0.3:33468","client":"conn3","doc":{"driver":{"name":"PyMongo","version":"4.0.1"},"os":{"ty
e":"Linux","name":"Linux","architecture":"aarch64","version":"5.10.25-linuxkit"},"platform":"CPython 3.10.2.final.0"}}}
mongodb_1  | {"t":{"$date":"2022-02-21T07:05:05.219+00:00"},"s":"I",  "c":"STORAGE",  "id":20320,  "ctx":"conn3","msg":"creat
Collection","attr":{"namespace":"sample_db.sample_collection","uuidDisposition":"generated","uuid":{"uuid":{"$uuid":"e027dcad-
98d-4db3-938a-655fefa31286"}},"options":{}}}
mongodb_1  | {"t":{"$date":"2022-02-21T07:05:05.233+00:00"},"s":"I",  "c":"INDEX",    "id":20345,  "ctx":"conn3","msg":"Index
build: done building","attr":{"buildUUID":null,"namespace":"sample_db.sample_collection","index":"_id_","commitTimestamp":null
}
pycode_1   | Inserted into the MongoDB database!
pycode_1   | Fecthed from MongoDB:  {'_id': ObjectId('621339a02e42ff9cd91dd646'), 'Name:': 'A Narendiran', 'SRN': 'PES1UG19CS0
1'}
mongodb_1  | {"t":{"$date":"2022-02-21T07:05:05.716+00:00"},"s":"I",  "c":"-",        "id":20883,  "ctx":"conn1","msg":"Inter
upted operation as its client disconnected","attr":{"opId":17}}
mongodb_1  | {"t":{"$date":"2022-02-21T07:05:05.719+00:00"},"s":"I",  "c":"NETWORK",  "id":22944,  "ctx":"conn1","msg":"Conne
tion ended","attr":{"remote":"172.21.0.3:33464","uuid":"a4fadd1d-de31-49bd-97f6-fce2df653adb","connectionId":1,"connectionCoun
":2}}
mongodb_1  | {"t":{"$date":"2022-02-21T07:05:05.729+00:00"},"s":"I",  "c":"NETWORK",  "id":22944,  "ctx":"conn3","msg":"Conne
tion ended","attr":{"remote":"172.21.0.3:33468","uuid":"beabf61e-595b-4a9f-8f77-1fd837f9bd8a","connectionId":3,"connectionCoun
":1}}
mongodb_1  | {"t":{"$date":"2022-02-21T07:05:05.729+00:00"},"s":"I",  "c":"NETWORK",  "id":22944,  "ctx":"conn2","msg":"Conne
tion ended","attr":{"remote":"172.21.0.3:33466","uuid":"0fd642cb-2084-438c-aeff-84d445578d15","connectionId":2,"connectionCoun
":0}}
compose_pycode_1 exited with code 0
```

4b.png

```
pycode_3   | Inserted into the MongoDB database!
pycode_3   | Fecthed from MongoDB:  {'_id': ObjectId('621339a02e42ff9cd91dd646'), 'Name:': 'A Narendiran', 'SRN': 'PES1UG19CS0
1'}
mongodb_1  | {"t":{"$date":"2022-02-21T07:09:54.964+00:00"},"s":"I",  "c":"NETWORK",  "id":22943,  "ctx":"listener","msg":"Co
nection accepted","attr":{"remote":"172.21.0.5:43302","uuid":"40c7a410-1a99-4795-8123-78fb2aa49a0e","connectionId":4,"connecti
nCount":4}}
mongodb_1  | {"t":{"$date":"2022-02-21T07:09:54.965+00:00"},"s":"I",  "c":"NETWORK",  "id":51800,  "ctx":"conn4","msg":"clien
 metadata","attr":{"remote":"172.21.0.5:43302","client":"conn4","doc":{"driver":{"name":"PyMongo","version":"4.0.1"},"os":{"ty
e":"Linux","name":"Linux","architecture":"aarch64","version":"5.10.25-linuxkit"},"platform":"CPython 3.10.2.final.0"}}}
mongodb_1  | {"t":{"$date":"2022-02-21T07:09:54.966+00:00"},"s":"I",  "c":"NETWORK",  "id":22943,  "ctx":"listener","msg":"Co
nection accepted","attr":{"remote":"172.21.0.5:43304","uuid":"dffd5db9-a416-453a-8fdc-ece6e07cffc3","connectionId":5,"connecti
nCount":5}}
mongodb_1  | {"t":{"$date":"2022-02-21T07:09:54.966+00:00"},"s":"I",  "c":"NETWORK",  "id":22943,  "ctx":"listener","msg":"Co
nection accepted","attr":{"remote":"172.21.0.5:43306","uuid":"cc59d014-d41f-4791-9f78-c7c9c5c2999a","connectionId":6,"connecti
nCount":6}}
mongodb_1  | {"t":{"$date":"2022-02-21T07:09:54.967+00:00"},"s":"I",  "c":"NETWORK",  "id":51800,  "ctx":"conn6","msg":"clien
 metadata","attr":{"remote":"172.21.0.5:43306","client":"conn6","doc":{"driver":{"name":"PyMongo","version":"4.0.1"},"os":{"ty
e":"Linux","name":"Linux","architecture":"aarch64","version":"5.10.25-linuxkit"},"platform":"CPython 3.10.2.final.0"}}}
mongodb_1  | {"t":{"$date":"2022-02-21T07:09:54.967+00:00"},"s":"I",  "c":"NETWORK",  "id":51800,  "ctx":"conn5","msg":"clien
 metadata","attr":{"remote":"172.21.0.5:43304","client":"conn5","doc":{"driver":{"name":"PyMongo","version":"4.0.1"},"os":{"ty
e":"Linux","name":"Linux","architecture":"aarch64","version":"5.10.25-linuxkit"},"platform":"CPython 3.10.2.final.0"}}}
pycode_1   | Inserted into the MongoDB database!
pycode_1   | Fecthed from MongoDB:  {'_id': ObjectId('621339a02e42ff9cd91dd646'), 'Name:': 'A Narendiran', 'SRN': 'PES1UG19CS0
1'}
```
```
mongodb_1  | {"t":{"$date":"2022-02-21T07:09:54.993+00:00"},"s":"I",  "c":"NETWORK",  "id":51800,  "ctx":"conn8","msg":"clien
 metadata","attr":{"remote":"172.21.0.4:43090","client":"conn8","doc":{"driver":{"name":"PyMongo","version":"4.0.1"},"os":{"ty
e":"Linux","name":"Linux","architecture":"aarch64","version":"5.10.25-linuxkit"},"platform":"CPython 3.10.2.final.0"}}}
mongodb_1  | {"t":{"$date":"2022-02-21T07:09:54.994+00:00"},"s":"I",  "c":"NETWORK",  "id":51800,  "ctx":"conn9","msg":"clien
 metadata","attr":{"remote":"172.21.0.4:43092","client":"conn9","doc":{"driver":{"name":"PyMongo","version":"4.0.1"},"os":{"ty
e":"Linux","name":"Linux","architecture":"aarch64","version":"5.10.25-linuxkit"},"platform":"CPython 3.10.2.final.0"}}}
pycode_2   | Inserted into the MongoDB database!
pycode_2   | Fecthed from MongoDB:  {'_id': ObjectId('621339a02e42ff9cd91dd646'), 'Name:': 'A Narendiran', 'SRN': 'PES1UG19CS0
1'}
mongodb_1  | {"t":{"$date":"2022-02-21T07:09:55.449+00:00"},"s":"I",  "c":"-",        "id":20883,  "ctx":"conn1","msg":"Inter
upted operation as its client disconnected","attr":{"opId":13}}
mongodb_1  | {"t":{"$date":"2022-02-21T07:09:55.451+00:00"},"s":"I",  "c":"NETWORK",  "id":22944,  "ctx":"conn1","msg":"Conne
tion ended","attr":{"remote":"172.21.0.3:33498","uuid":"9718b08d-d2f1-4ed3-b2e5-446eae336882","connectionId":1,"connectionCoun
":8}}
```