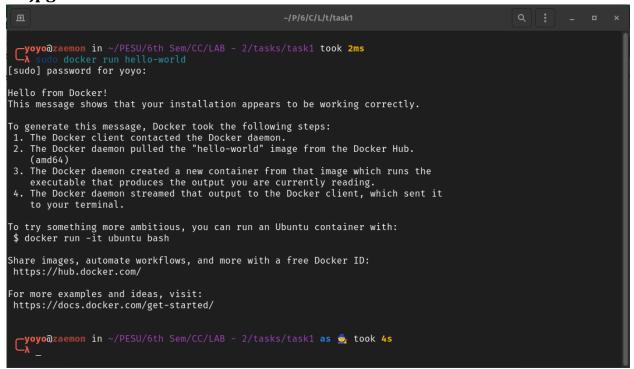
#### UE20CS351-CC LAB-2

NAME	SRN	CLASS & SECTION
VIJAY J	PES2UG20CS815	6 - J

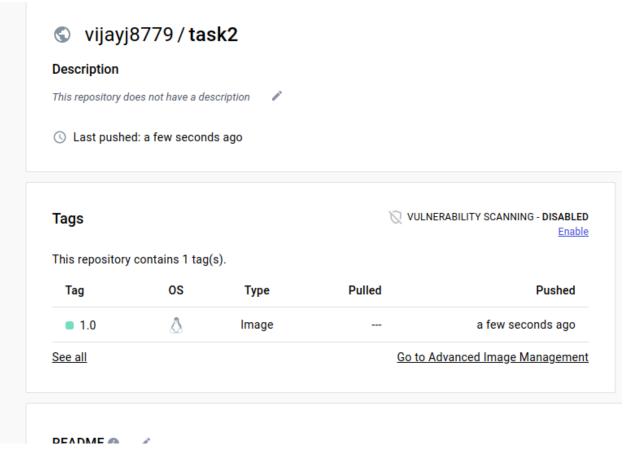
## Task 1: Installing Docker Engine 1a.jpg



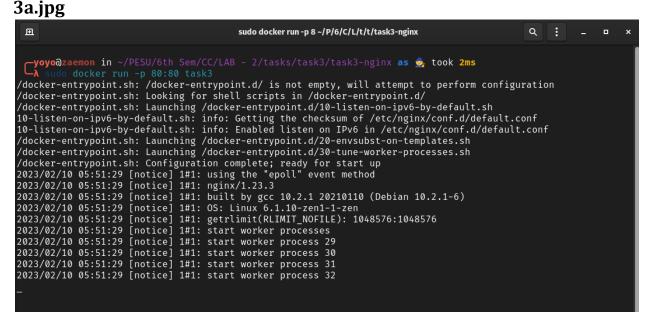
# Task 2: Docker images and docker files 2a.jpg



#### 2b.jpg



### Task 3: Exposing ports, docker networks



#### 3b.jpg



#### My SRN is PES2UG20CS815

I am running a nginx container!

#### 3c.jpg

### 3d.jpg

```
~/P/6/C/L/t/t/task3-pymongo
 ∟λ docker run -dp 27017:27017 --network=my-bridge-network --name=mongodb mongo:latest
540bcf2ff2c291019060e560d17f1126188bb5f46848fad55cbf24d798255c66
 yoyo@zaemon in ~/PESU/6th Sem/CC/LAB - 2/tasks/task3/task3-pymongo via ♦ v3.10.9 as € took 2s
CONTAINER ID
               IMAGE
                              COMMAND
                                                        CREATED
                                                                             STATUS
                                                                                                              POR
TS
                                             NAMES
540bcf2ff2c2
               mongo:latest
                               "docker-entrypoint.s.
                                                        37 seconds ago
                                                                             Up 34 seconds
                                                                                                              0.0
.0.0:27017->27017/tcp, :::27017->27017/tcp
f3f0d0a88870
               task3
                               "python sample.py"
                                                                             Exited (0) 3 minutes ago
                                                        3 minutes ago
                                              optimistic_williamson
8e95156ffb90
                                                                             Exited (0) 4 minutes ago
               task3
                               "python sample.py
                                                        4 minutes ago
                                              happy_brahmagupta
8a0a2dd45945
               mongo
                               "docker-entrypoint.s.
                                                        20 minutes ago
                                                                             Created
                                              pedantic_cohen
b4163c1cf910
                               "docker-entrypoint.s...
                                                        21 minutes ago
                                                                             Exited (0) About a minute ago
               mongo
                                              romantic_franklin
11eb33ece15a
               8e0df7201210
                               "/docker-entrypoint...
                                                                             Exited (0) 23 minutes ago
                                                        25 minutes ago
                                              nervous_bassi
20e565afb3c6
               task2
                               "./a.out"
                                                        About an hour ago
                                                                             Exited (0) About an hour ago
                                              crazy_elbakyan
a3f2f2e6a690
               task2
                               "./a.out"
                                                        About an hour ago
                                                                             Exited (0) About an hour ago
                                              dazzling_raman
                               "/hello"
2ea8adb5864b
               hello-world
                                                                             Exited (0) 2 hours ago
                                                        2 hours ago
                                              keen_wu
ec2c982b1b5c
               hello-world
                               "/hello"
                                                        2 hours ago
                                                                             Exited (0) 2 hours ago
                                              boring_rosalind
 _yoyo@zaemon in ~/PESU/6th Sem/CC/LAB - 2/tasks/task3/task3-pymongo via ♦ v3.10.9 as 🤦 took 43ms
```

#### 3e.jpg

```
~/P/6/C/L/t/t/task3-pymongo
 yoyo@zaemon in ~/PESU/6th Sem/CC/LAB - 2/tasks/task3/task3-pymongo via ♦ v3.10.9 as ∰ took 2ms docker build -t task3 .
Sending build context to Docker daemon 3.072kB
Step 1/5 : FROM python
 ---> 39b10b20cfb2
Step 2/5 : RUN apt-get update
 ---> Using cache
---> 787f799ebdb4
Step 3/5 : RUN pip install pymongo
 ---> Using cache
---> 786d755a76f1
Step 4/5 : COPY sample.py sample.py
 ---> 5848d784e7d4
Step 5/5 : CMD ["python","sample.py"]
---> Running in 840c8eb77386
Removing intermediate container 840c8eb77386
---> 43f1a391cba4
Successfully built 43f1a391cba4
Successfully tagged task3:latest
 voyo@zaemon in ~/PESU/6th Sem/CC/LAB - 2/tasks/task3/task3-pymongo via ♦ v3.10.9 as ∰ took 7s docker run --network=my-bridge-network task3
Inserted into the MongoDB database!
Fecthed from MongoDB: \[ \'_id': ObjectId('63e5e4a2ff90d9ef4ef6ffd0'), 'Name:': 'Vijay J', 'SRN': 'PES2UG20CS815
 yoyo@zaemon in ~/PESU/6th Sem/CC/LAB - 2/tasks/task3/task3-pymongo via ♦ v3.10.9 as ∰ took 6s
```

#### Task 4: Docker compose

#### 4a.jpg

```
"acquireCount":{{"r":9}}},"flowControl":{{"acquireCount":1,"timeAcquiringMicros":4},"writeConcern":{{"w":"majorit}y","wtimeout":15000, "provenance":"clientSupplied"},"storage":{},"protocol":"op_msg","durationMillis":109}}
task4-mongodb-1 | {"t":{"$date":?023-02-10706:41:19,251+00:007},"s":T", "c":"INDEX", "id':20345, "ctx
":"conn3","msg":Tlndex build: done building", "attr":{buildUUID":null,"collectionUUID":{"uuid":"$uuid":"a476f
759-44b3-423b-a9dd-7fe7d2f86d21"}},"namespace":"sample_db.sample_collection", "index":"id_", "ident":"index-8--
7590680740646383080", "collectionIdent":"collection-7--7590680740646383080", "conmitTimestamp":null}
task4-mongodb-1 | {"t":{"$date":"2023-02-10706:41:19,252+00:007},"s":"T", "c":"COMMAND", "id':51803, "ctx
":"conn3","msg":"Slow query","attr":{type:":command","ms:"sample_bs.ample_collection","command";"insert":
sample_collection","ordered":true, "lsid":{"id":{"$uuid":"30f2e82e-ba99-4e6f-906d-70ad0dee6e82"}},"$db":"sample_db"},"iniserted":1,"key$Inserted":1,"numYields":0,"reslen":4$,"locks":{"ParallelBatchWriterMode":{"acquireCount":{"w":3}},"flowball":{"acquireCount":{"w":3}},"flowball":{"acquireCount":{"w":3}},"flowball":{"acquireCount":{"w":3}},"flowball":{"acquireCount":{"m":3}},"flowball":{"acquireCount":{"r":3}},"flowball":{"acquireCount":{"r":3}},"flowball":{"acquireCount":{"r":3}},"flowball":{"acquireCount":{"r":3}},"flowball":{"acquireCount":{"r":3}},"flowball":{"acquireCount":{"r":3}},"flowball":{"acquireCount":{"r":3}},"flowball":{"acquireCount":{"r":3}},"flowball":{"acquireCount":{"r":3}},"flowball":{"acquireCount":{"r":3}},"flowball":{"acquireCount":{"r":3}},"flowball":{"acquireCount":{"r":3}},"flowball":{"acquireCount":{"r":3}},"flowball":{"acquireCount":{"r":3}},"flowball":{"acquireCount":{"r":3}},"flowball":{"acquireCount":{"r":3}},"flowball":{"acquireCount":{"r":3}},"flowball":{"acquireCount":{"r":3}},"flowball":{"acquireCount":{"r":3}},"flowball":{"acquireCount":{"r":3}},"flowball":{"acquireCount":{"r":3}},"flowball":{"acquireCount":{"r":3}},"flowball":{"acqu
```

#### 4b.jpg

```
task4-mongodb-1 | {"t":{"$date":"2023-02-10T06:46:36.670+00:00"},"s":"I", "c":"NETWORK", "id":51800, "ctx":"conn4","msg":"client m
ptadata","attr":{"remote":"172.19.0.4:41842","client":"conn4","doc":{"driver":{"name":"PyMongo","version":"4.3.3"},"os":{"type":"Linux",
"name":"Linux","architecture":"x86_64","version":"6.1.10-zen1-1-zen"),"platform":"CPython 3.11.2.final.0"}}}
task4-mongodb-1 | {"t":{"$date":"2023-02-10T06:46:36.673+00:00"},"s":"I", "c":"NETWORK", "id":22943, "ctx":"listener","msg":"Conne
tion accepted","attr":{"remote":"172.19.0.4:41846","uuid":"9d673153-1718-4b71-b493-9962bddc9ab2","connectionId":5,"connectionCount":2}
.
task4-mongodb-1 | {"t":{"$date":"2023-02-10T06:46:36.673+00:00"},"s":"I", "c":"NETWORK", "id":51800, "ctx":"conn5","msg":"client m
ptadata","attr":{"remote":"172.19.0.4:41846","client":"conn5","doc":{"driver":{"name":"PyMongo","version":"4.3.3"},"os":{"type":"Linux"
,"name":"Linux","architecture":"x86_64","version":"6.1.10-zen1-1-zen"},"platform":"CPython 3.11.2.final.0"}}}
task4-mongodb-1 | {"t":{"$date":"2023-02-10T06:46:36.673+00:00"},"s":"I", "c":"NETWORK", "id":22943, "ctx":"listener","msg":"Conne
tion accepted","attr":{"remote":"172.19.0.4:41848","uuid":"897c6456-3f3b-4766-b24f-abb57010eafc","connectionId":6,"connectionCount":3}
 ask4-mongodb-1 | {"t":{"$date":"2023-02-10T06:46:36.675+00:00"},"s":"I", "c":"NETWORK", "id":51800, "ctx":"conn6","msg":"client m
tadata","attr":{"remote":"172.19.0.4:41848","client":"conn6","doc":{"driver":{"name":"PyMongo","version":"4.3.3"},"os":{"type":"Linux"
"name":"Linux","architecture":"x86_64","version":"6.1.10-zen1-1-zen"},"platform":"CPython 3.11.2.final.0"}}}
                                                           chitecture: x05_04, v1346.
Inserted into the MongoDB database!
Fecthed from MongoDB: {'_id': ObjectId('63e5e70abc2d6af4cd8f26b7'), 'Name:': 'Vijay J', 'SRN': 'PES2UG20CS815'}
Fecthed from MongoDB: {'_id': 07 172400-00"} "s":"I" "c":"-", "id":20883, "ctx":"conn4", "msg":"Interrup
task4-mongodo-1 | {"t":("$date":"2023-02-10T06:46:40.146+00:00"},"s":"I", "c":"NETWORK", "id":22943, "ctx":"listener","msg":"Connection Count":1}
ction accepted","attr":{"remote":"172.19.0.5:42642","uuid":"a3818e87-7870-4663-8b73-1d18458aebe3","connectionId":7,"connectionCount":1}
  ask4-mongodb-1 | {"t":{"$date":"2023-02-10T06:46:40.147+00:00"},"s":"I", "c":"NETWORK", "id":51800, "ctx":"conn7","msg":"client m
tadata","attr":{"remote":"172.19.0.5:42642","client":"conn7","doc":{"driver":{"name":"PyMongo","version":"4.3.3"},"os":{"type":"Linux"
"name":"Linux","architecture":"x86_64","version":"6.1.10-zen1-1-zen"},"platform":"CPython 3.11.2.final.0"}}}
  n ended","attr":{"remote":"172.19.0.4:41848","uuid":"897c6456-3f3b-4766-b24f-abb57010eafc","connectionId":6,"connectionCount":1}}

ask4-mongodb-1 | {"t":{"$date":"2023-02-10T06:46:37.183+00:00"},"s":"I", "c":"NETWORK", "id":22944, "ctx":"conn5","msg":"Connecti
n ended","attr":{"remote":"172.19.0.4:41846","uuid":"9d673153-1718-4b71-b493-9962bddc9ab2","connectionId":5,"connectionCount":0}}
task4-mongodb-1 | {"t":{"$date":"2023-02-10T06:46:40.146+00:00"},"s":"I", "c":"NETWORK", "id":22943, "ctx":"listener","msg":"Connection accepted","attr":{"remote":"172.19.0.5:42642","uuid":"a3818e87-7870-4663-8b73-1d18458aebe3","connectionId":7,"connectionCount":1}
task4-mongodb-1 | {"t":{"$date":"2023-02-10T06:46:40.147+00:00"},"s":"I", "c":"NETWORK", "id":51800, "ctx":"conn7","msg":"client m
etadata","attr":{"remote":"172.19.0.5:42642","client":"conn7","doc":{"driver":{"name":"PyMongo","version":"4.3.3"},"os":{"type":"Linux"
,"name":"Linux","architecture":"x86_64","version":"6.1.10-zen1-1-zen"},"platform":"CPython 3.11.2.final.0"}}}
task4-mongodb-1 | {"t":{"$date":"2023-02-10T06:46:40.152+00:00"},"s":"I", "c":"NETWORK", "id":22943, "ctx":"listener","msg":"Conne
tion accepted","attr":{"remote":"172.19.0.5:42648","uuid":"8d09d8ab-a132-4a7b-b8b2-5db0c94c9262","connectionId":8,"connectionCount":2}
 ask4-mongodb-1 | {"t":{"$date":"2023-02-10T06:46:40.153+00:00"},"s":"I", "c":"NETWORK", "id":22943, "ctx":"listener","msg":"Conne:
tion accepted","attr":{"remote":"172.19.0.5:42656","uuid":"c6e9a772-1b1f-4339-bee3-38bb7cf8624a","connectionId":9,"connectionCount":3}
 .ask4-mongodb-1 | {"t":{"$date":"2023-02-10T06:46:40.153+00:00"},"s":"I", "c":"NETWORK", "id":51800, "ctx":"conn8","msg":"client metadata","attr":{"remote":"172.19.0.5:42648","client":"conn8","doc":{"driver":{"name":"PyMongo","version":"4.3.3"},"os":{"type":"Linux""name":"Linux","architecture":"x86_64","version":"6.1.10-zen1-1-zen"},"platform":"CPython 3.11.2.fina1.0"}}}
ask4-mongodb-1 | {"t":{"$date":"2023-02-10T06:46:40.154+00:000"},"s":"I", "c":"NETWORK", "id":51800, "ctx":"conn9","msg":"client metadata","attr":{"remote":"172.19.0.5:42656","client":"conn9","doc":{"driver":{"name":"PyMongo","version":"4.3.3"},"os":{"type":"Linux""name":"Linux","architecture":"x86_64","version":"6.1.10-zen1-1-zen"},"platform":"CPython 3.11.2.fina1.0"}}}
                                                           task4-pycode-1 | Feethed from MongoD8: {'_id': ObjectId('63e5e70abc2d6af4cd8f26b7'), 'Name:': 'Vijay J', 'SRN': 'PES2UG20CS815'}
task4-mongodb-1 | {"t":{"$date":"2023-02-10706:46:40.654-00:00"}, "s":"I", "c":"-", "id":20883, "ctx":"conn7", "msg":"Interrup
ted operation as its client disconnected", "attr":{"opId":183}}
task4-mongodb-1 | {"t":{"$date":"2023-02-10706:46:40.655+00:00"}, "s":"I", "c":"NETWORK", "id":22944, "ctx":"conn7", "msg":"Connection
on ended", "attr":{"remote":"172.19.0.5:42642", "uuid":"a3818e87-7870-4663-8b73-1d18458aebe3", "connectionId":7, "connectionCount":2}}
task4-mongodb-1 | {"t":{"$date":"2023-02-10706:46:40.664+00:00"}, "s":"I", "c":"NETWORK", "id":22944, "ctx":"connex, "msg":"Connection
on ended", "attr":{"remote":"172.19.0.5:42648", "uuid":"8d09d8ab-a132-4a7b-b8b2-5db0c94c9262", "connectionId":8, "connectionCount":1}}
task4-mongodb-1 | {"t":{"$date":"2023-02-10706:46:40.664+00:00"}, "s":"I", "c":"NETWORK", "id":22944, "ctx":"conney", "msg":"Connection
on ended", "attr":{"remote":"172.19.0.5:42648", "uuid":"66e9a772-1b1f-4339-bee3-38bb7cf8624a", "connectionId":9, "connectionCount":0}}
```