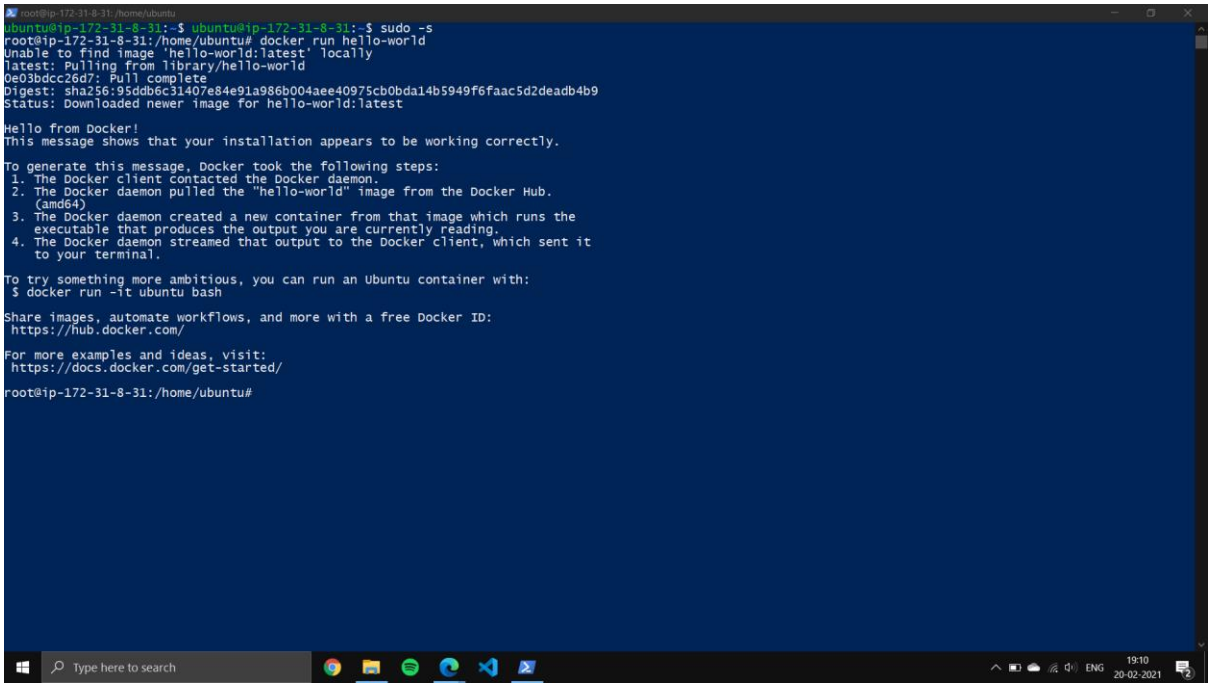
CLOUD COMPUTING LAB: WEEK 5

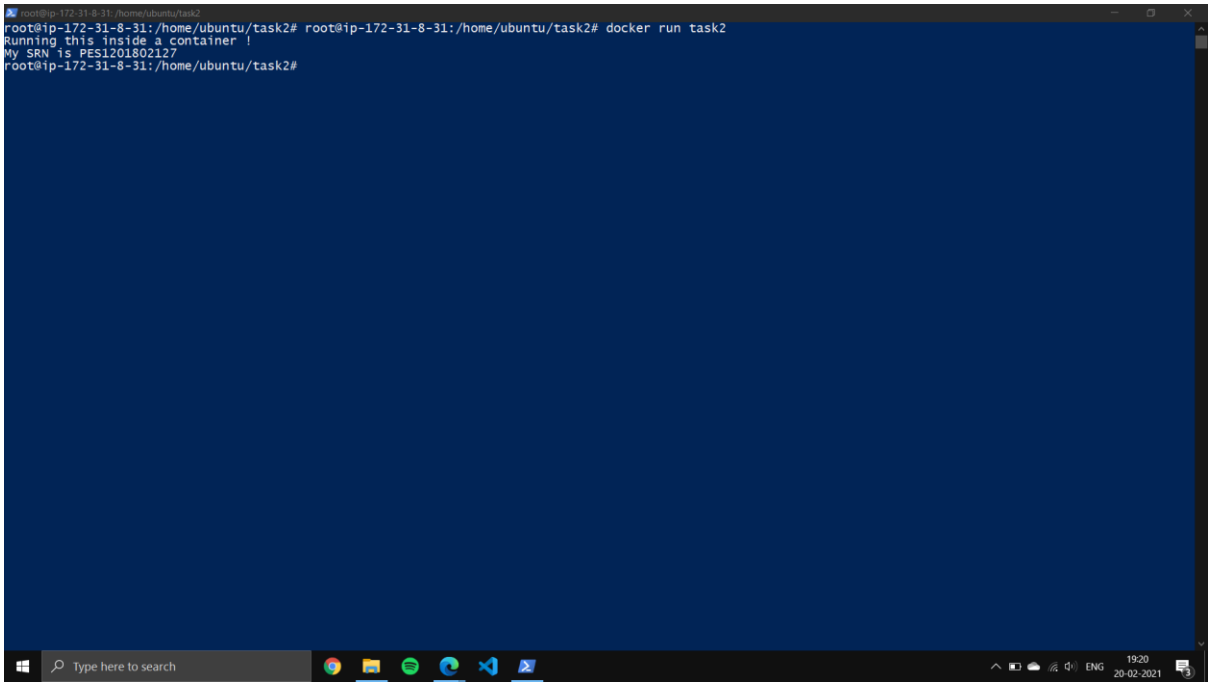
PES1201802127

Siddharth K Rao

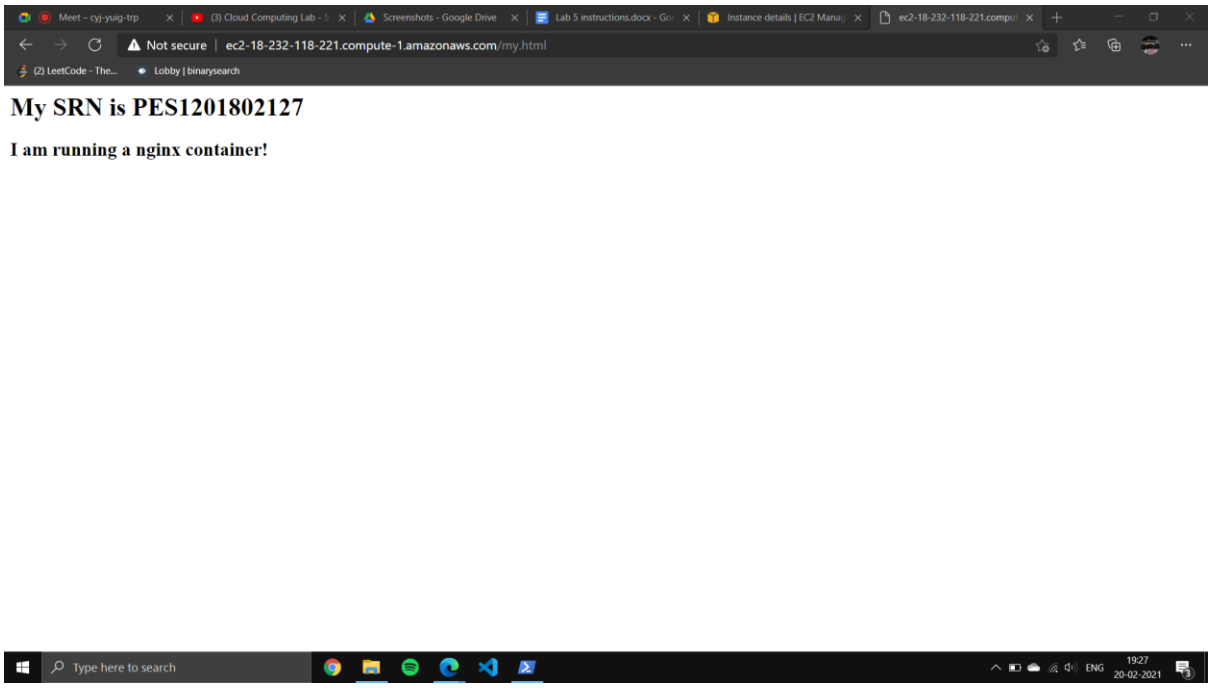
1.) Installing Docker Engine on EC2



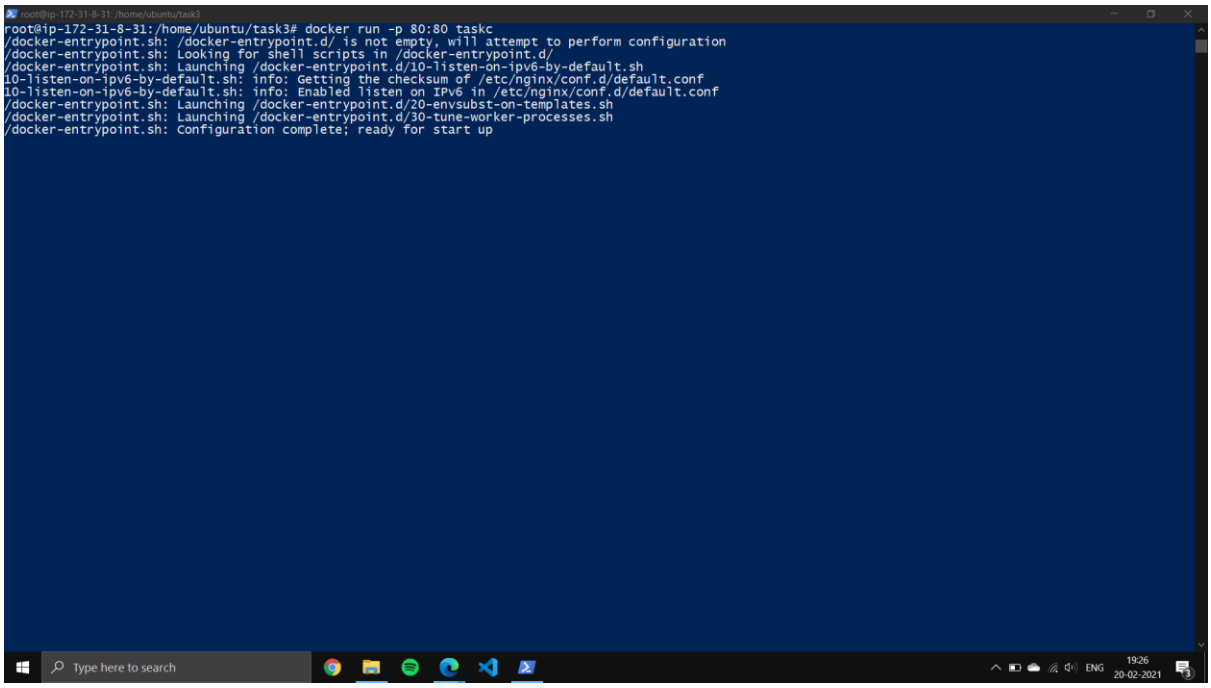
2.) Docker images and docker files



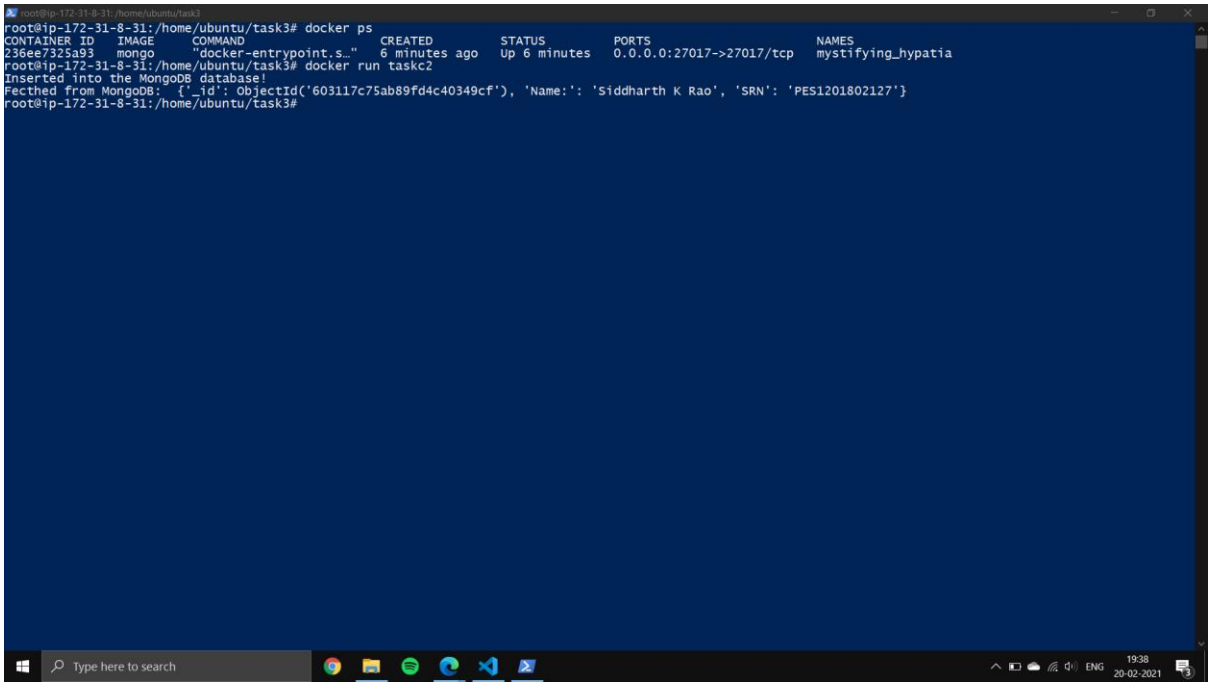
3.) Exposing ports, docker networks



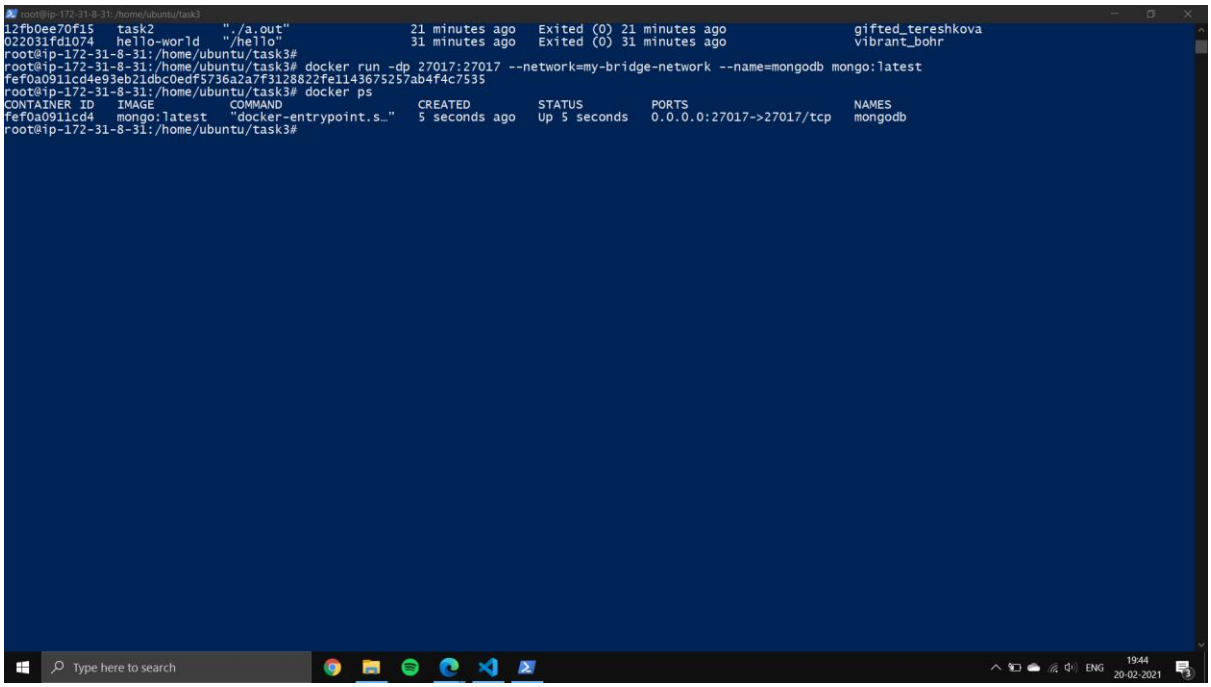
3a



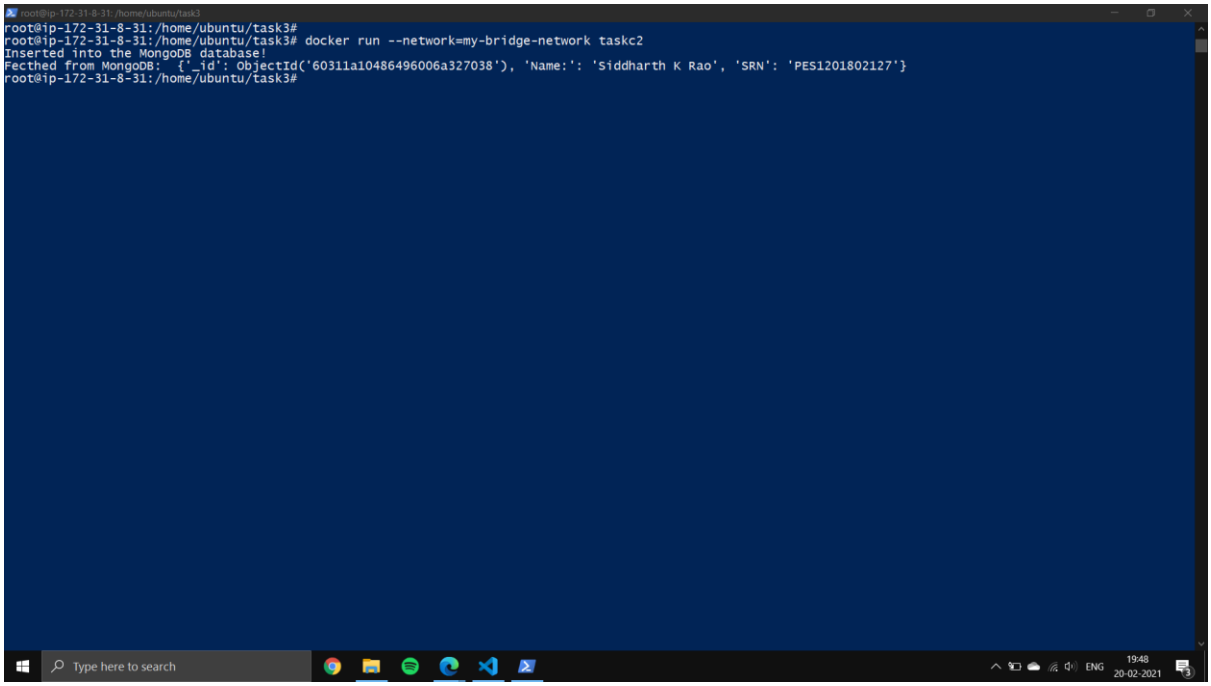
3b


root@ip-172-31-8-31: /home/ubuntu/task3
root@ip-172-31-8-31:/home/ubuntu/task3# docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
236ee7325a93 mongo "docker-entrypoint.s…" 6 minutes ago Up 6 minutes 0.0.0.0:27017->27017/tcp mystifying_hypatia
root@ip-172-31-8-31:/home/ubuntu/task3# docker run taskc2
Inserted into the MongoDB database!
Fecthed from MongoDB: {'_id': ObjectId('603117c75ab89fd4c40349cf'), 'Name:': 'Siddharth K Rao', 'SRN': 'PES1201802127'}
root@ip-172-31-8-31:/home/ubuntu/task3#
Type here to search
ENG
19:38
20-02-2021

3c

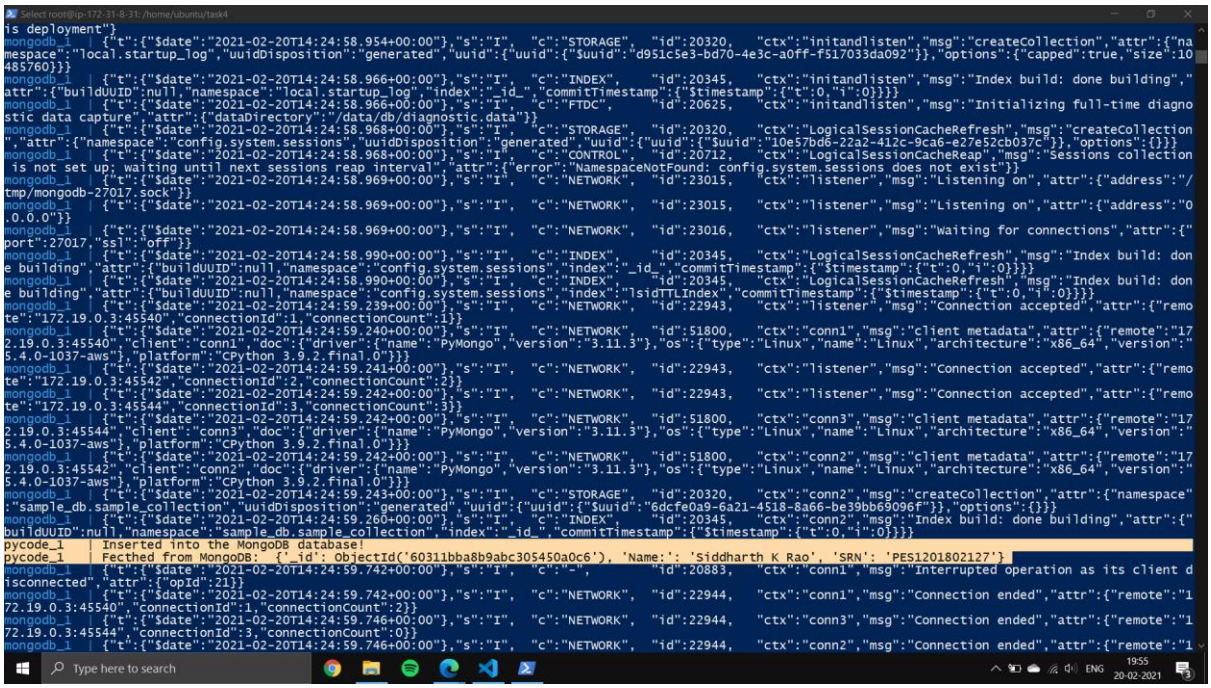

root@ip-172-31-8-31: /home/ubuntu/task3
12fb0ee70f15 task2 "./a.out" 21 minutes ago Exited (0) 21 minutes ago gifted_tereshkova
022031fd1074 hello-world "/hello" 31 minutes ago Exited (0) 31 minutes ago vibrant_bohr
root@ip-172-31-8-31:/home/ubuntu/task3#
root@ip-172-31-8-31:/home/ubuntu/task3# docker run -dp 27017:27017 --network=my-bridge-network --name=mongodb mongo:latest
fef0a0911cd4e93eb21dbc0edf5736a2a7f3128822fe1143675257ab4f4c7535
root@ip-172-31-8-31:/home/ubuntu/task3# docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
fef0a0911cd4 mongo:latest "docker-entrypoint.s…" 5 seconds ago Up 5 seconds 0.0.0.0:27017->27017/tcp mongodb
root@ip-172-31-8-31:/home/ubuntu/task3#
Type here to search
ENG
19:44
20-02-2021

3d

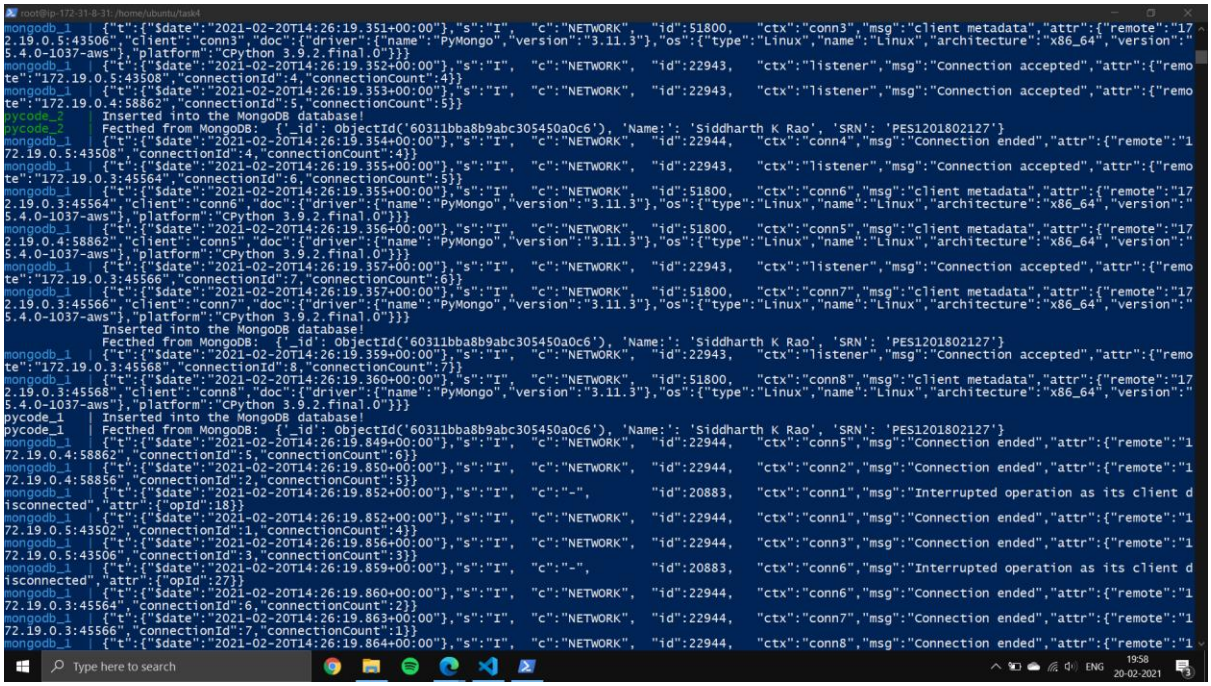


3e

4.) Docker compose



4a


root@ip-172-31-8-31: /home/ubuntu/task4
mongodb_1 | {"t":{"$date":"2021-02-20T14:26:19.351+00:00"},"s":"I", "c":"NETWORK", "id":51800, "ctx":"conn3","msg":"client metadata","attr":{"remote":"17
2.19.0.5:43506","client":"conn3","doc":{"driver":{"name":"PyMongo","version":"3.11.3"},"os":{"type":"Linux","name":"Linux","architecture":"x86_64","version":"
5.4.0-1037-aws"},"platform":"CPython 3.9.2.final.0"}}}
mongodb_1 | {"t":{"$date":"2021-02-20T14:26:19.352+00:00"},"s":"I", "c":"NETWORK", "id":22943, "ctx":"listener","msg":"Connection accepted","attr":{"remo
te":"172.19.0.5:43508","connectionId":4,"connectionCount":4}}
mongodb_1 | {"t":{"$date":"2021-02-20T14:26:19.353+00:00"},"s":"I", "c":"NETWORK", "id":22943, "ctx":"listener","msg":"Connection accepted","attr":{"remo
te":"172.19.0.4:58862","connectionId":5,"connectionCount":5}}
pycode_2 | Inserted into the MongoDB database!
pycode_2 | Fecthed from MongoDB: {'_id': ObjectId('60311bba8b9abc305450a0c6'), 'Name:': 'Siddharth K Rao', 'SRN': 'PES1201802127'}
mongodb_1 | {"t":{"$date":"2021-02-20T14:26:19.354+00:00"},"s":"I", "c":"NETWORK", "id":22944, "ctx":"conn4","msg":"Connection ended","attr":{"remote":"1
72.19.0.5:43508","connectionId":4,"connectionCount":4}}
mongodb_1 | {"t":{"$date":"2021-02-20T14:26:19.355+00:00"},"s":"I", "c":"NETWORK", "id":22943, "ctx":"listener","msg":"Connection accepted","attr":{"remo
te":"172.19.0.3:45564","connectionId":6,"connectionCount":5}}
mongodb_1 | {"t":{"$date":"2021-02-20T14:26:19.355+00:00"},"s":"I", "c":"NETWORK", "id":51800, "ctx":"conn6","msg":"client metadata","attr":{"remote":"17
2.19.0.3:45564","client":"conn6","doc":{"driver":{"name":"PyMongo","version":"3.11.3"},"os":{"type":"Linux","name":"Linux","architecture":"x86_64","version":"
5.4.0-1037-aws"},"platform":"CPython 3.9.2.final.0"}}}
mongodb_1 | {"t":{"$date":"2021-02-20T14:26:19.356+00:00"},"s":"I", "c":"NETWORK", "id":51800, "ctx":"conn5","msg":"client metadata","attr":{"remote":"17
2.19.0.4:58862","client":"conn5","doc":{"driver":{"name":"PyMongo","version":"3.11.3"},"os":{"type":"Linux","name":"Linux","architecture":"x86_64","version":"
5.4.0-1037-aws"},"platform":"CPython 3.9.2.final.0"}}}
mongodb_1 | {"t":{"$date":"2021-02-20T14:26:19.357+00:00"},"s":"I", "c":"NETWORK", "id":22943, "ctx":"listener","msg":"Connection accepted","attr":{"remo
te":"172.19.0.3:45566","connectionId":7,"connectionCount":6}}
mongodb_1 | {"t":{"$date":"2021-02-20T14:26:19.357+00:00"},"s":"I", "c":"NETWORK", "id":51800, "ctx":"conn7","msg":"client metadata","attr":{"remote":"17
2.19.0.3:45566","client":"conn7","doc":{"driver":{"name":"PyMongo","version":"3.11.3"},"os":{"type":"Linux","name":"Linux","architecture":"x86_64","version":"
5.4.0-1037-aws"},"platform":"CPython 3.9.2.final.0"}}}
pycode_1 | Inserted into the MongoDB database!
pycode_1 | Fecthed from MongoDB: {'_id': ObjectId('60311bba8b9abc305450a0c6'), 'Name:': 'Siddharth K Rao', 'SRN': 'PES1201802127'}
mongodb_1 | {"t":{"$date":"2021-02-20T14:26:19.359+00:00"},"s":"I", "c":"NETWORK", "id":22943, "ctx":"listener","msg":"Connection accepted","attr":{"remo
te":"172.19.0.3:45568","connectionId":8,"connectionCount":7}}
mongodb_1 | {"t":{"$date":"2021-02-20T14:26:19.360+00:00"},"s":"I", "c":"NETWORK", "id":51800, "ctx":"conn8","msg":"client metadata","attr":{"remote":"17
2.19.0.3:45568","client":"conn8","doc":{"driver":{"name":"PyMongo","version":"3.11.3"},"os":{"type":"Linux","name":"Linux","architecture":"x86_64","version":"
5.4.0-1037-aws"},"platform":"CPython 3.9.2.final.0"}}}
pycode_1 | Inserted into the MongoDB database!
pycode_1 | Fecthed from MongoDB: {'_id': ObjectId('60311bba8b9abc305450a0c6'), 'Name:': 'Siddharth K Rao', 'SRN': 'PES1201802127'}
mongodb_1 | {"t":{"$date":"2021-02-20T14:26:19.849+00:00"},"s":"I", "c":"NETWORK", "id":22944, "ctx":"conn5","msg":"Connection ended","attr":{"remote":"1
72.19.0.4:58862","connectionId":5,"connectionCount":6}}
mongodb_1 | {"t":{"$date":"2021-02-20T14:26:19.850+00:00"},"s":"I", "c":"NETWORK", "id":22944, "ctx":"conn2","msg":"Connection ended","attr":{"remote":"1
72.19.0.4:58856","connectionId":2,"connectionCount":5}}
mongodb_1 | {"t":{"$date":"2021-02-20T14:26:19.852+00:00"},"s":"I", "c":"-", "id":20883, "ctx":"conn1","msg":"Interrupted operation as its client d
isconnected","attr":{"opId":18}}
mongodb_1 | {"t":{"$date":"2021-02-20T14:26:19.852+00:00"},"s":"I", "c":"NETWORK", "id":22944, "ctx":"conn1","msg":"Connection ended","attr":{"remote":"1
72.19.0.5:43502","connectionId":1,"connectionCount":4}}
mongodb_1 | {"t":{"$date":"2021-02-20T14:26:19.856+00:00"},"s":"I", "c":"NETWORK", "id":22944, "ctx":"conn3","msg":"Connection ended","attr":{"remote":"1
72.19.0.5:43506","connectionId":3,"connectionCount":3}}
mongodb_1 | {"t":{"$date":"2021-02-20T14:26:19.859+00:00"},"s":"I", "c":"-", "id":20883, "ctx":"conn6","msg":"Interrupted operation as its client d
isconnected","attr":{"opId":27}}
mongodb_1 | {"t":{"$date":"2021-02-20T14:26:19.860+00:00"},"s":"I", "c":"NETWORK", "id":22944, "ctx":"conn6","msg":"Connection ended","attr":{"remote":"1
72.19.0.3:45564","connectionId":6,"connectionCount":2}}
mongodb_1 | {"t":{"$date":"2021-02-20T14:26:19.863+00:00"},"s":"I", "c":"NETWORK", "id":22944, "ctx":"conn7","msg":"Connection ended","attr":{"remote":"1
72.19.0.3:45566","connectionId":7,"connectionCount":1}}
mongodb_1 | {"t":{"$date":"2021-02-20T14:26:19.864+00:00"},"s":"I", "c":"NETWORK", "id":22944, "ctx":"conn8","msg":"Connection ended","attr":{"remote":"1
Type here to search
ENG
19:58
20-02-2021

4b