Module 7: Docker Ecosystem & Networking

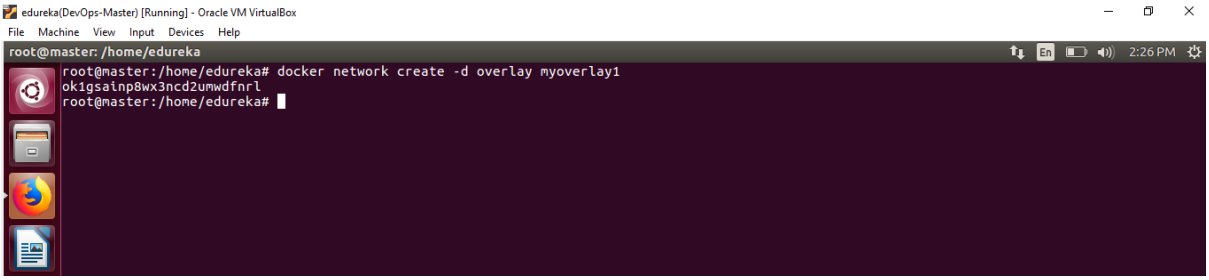
Demo Document

edureka!

Demo: 3 Create and deploy a multi-tier application over swarm cluster.

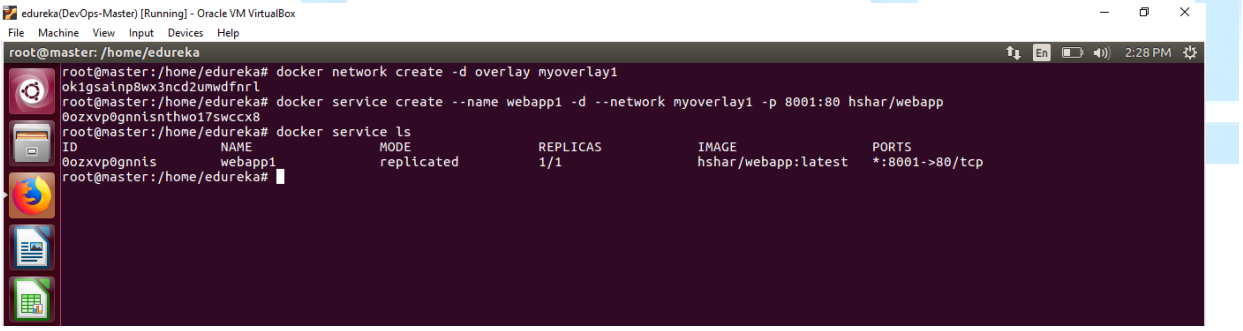
Step :1 Create an overlay network.

```
docker network create -d overlay myoverlay1
```



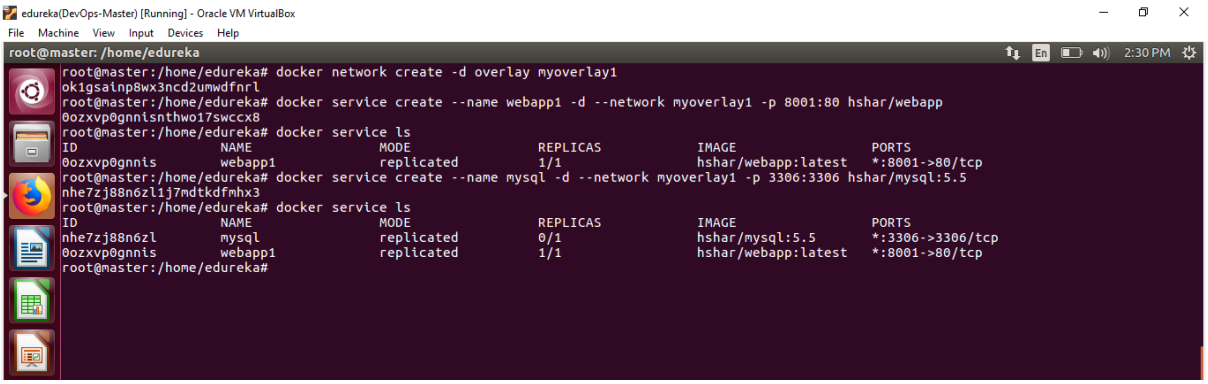
Step2: Create a service webapp 1 and use the network you have created to deploy this service over the swarm cluster.

```
docker service create - -name webapp1 -d - -network myoverlay1 -p
8001:80 hshar/webapp
```



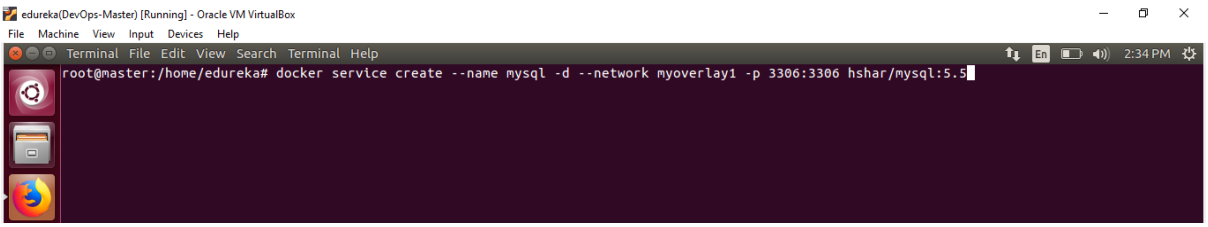
Step:3 Check if the services are created by checking it with the below command.

```
docker service ls
```



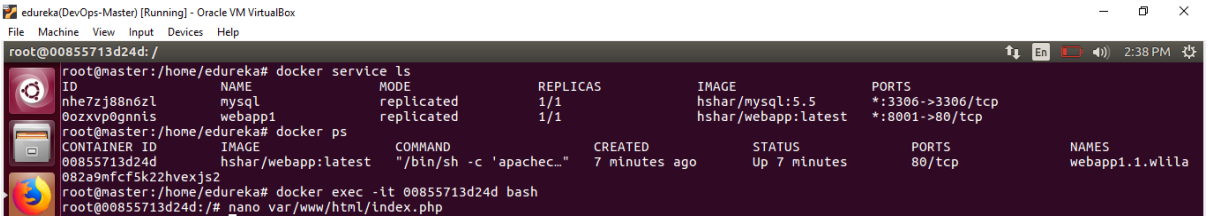
Step:4 Create a service mysql and use the network you have created to deploy the service over the swarm cluster.

```
docker service create –name mysql -d –network myoverlay1 -p 3306:3306 hshar/mysql:5.5
```



Step 5: Check which container is running on your master node and go inside the hshar/webapp container.

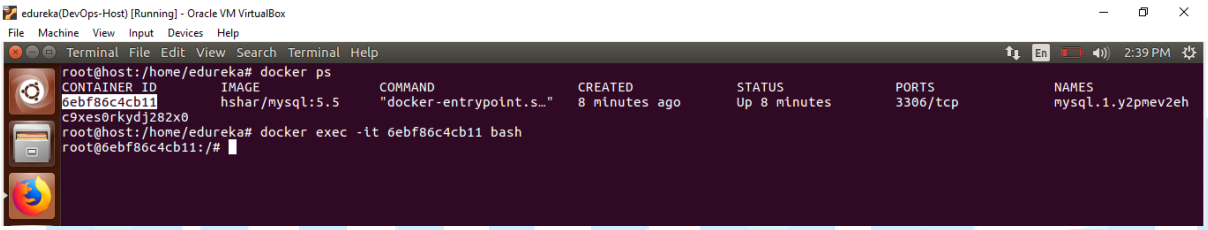
```
docker ps
docker exex -it container_id  bash
nano var/www/html/index.php
```



Step 6: Change $servername from localhost to mysql and $password from “” to “edureka” and save your index.php file by typing ctrl+x and then y to save and press enter.

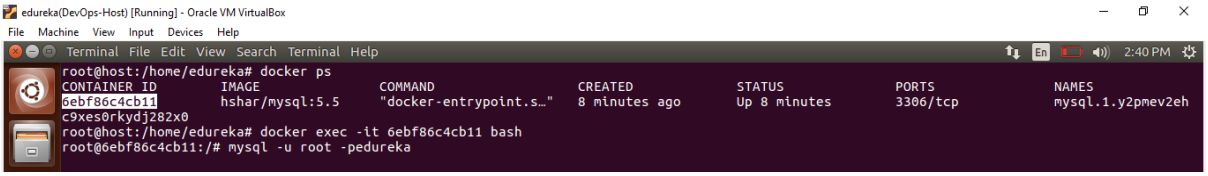
Step:7 Go inside mysql container which is running on other node .

```
Docker exec -it mysql container_id bash
```



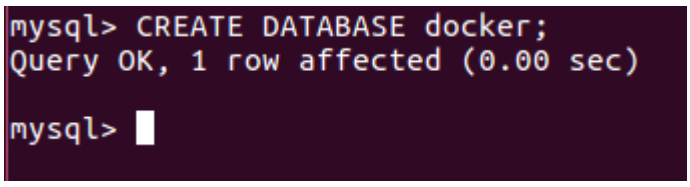
Step 8: Use the below commands to use database in mysql.

```
mysql -u root -pedureka
```

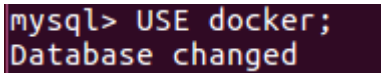


Step 9: Create a database and a table in mysql which will be used to get data from webapp1.

```
CREATE DATABASE docker;
```




```
USE docker;
```

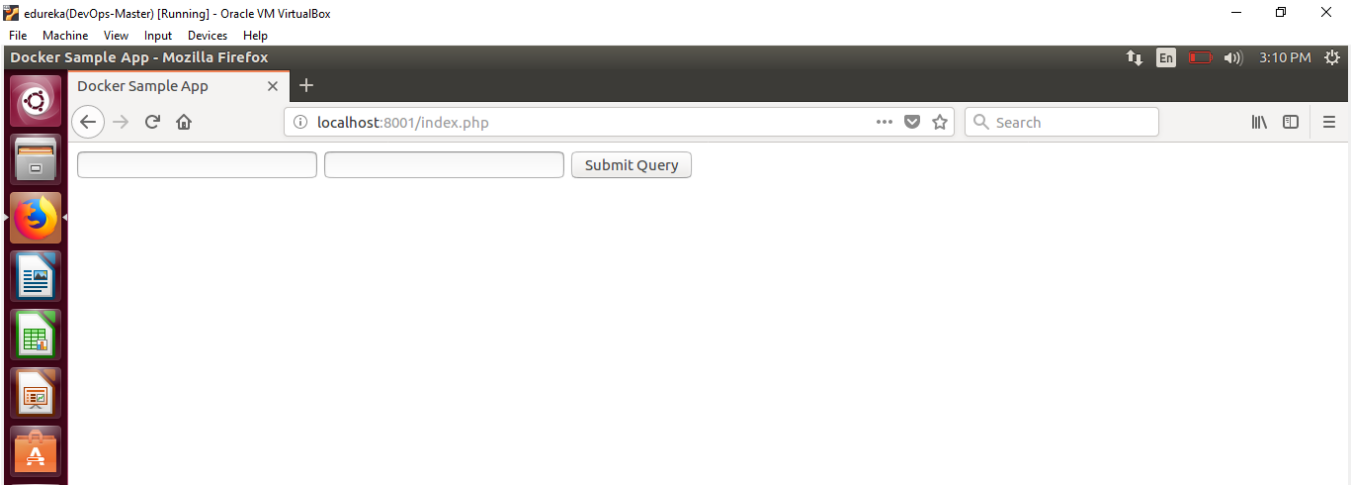



```
CREATE TABLE emp (name VARCHAR(10), phone VARCHAR(11));
```

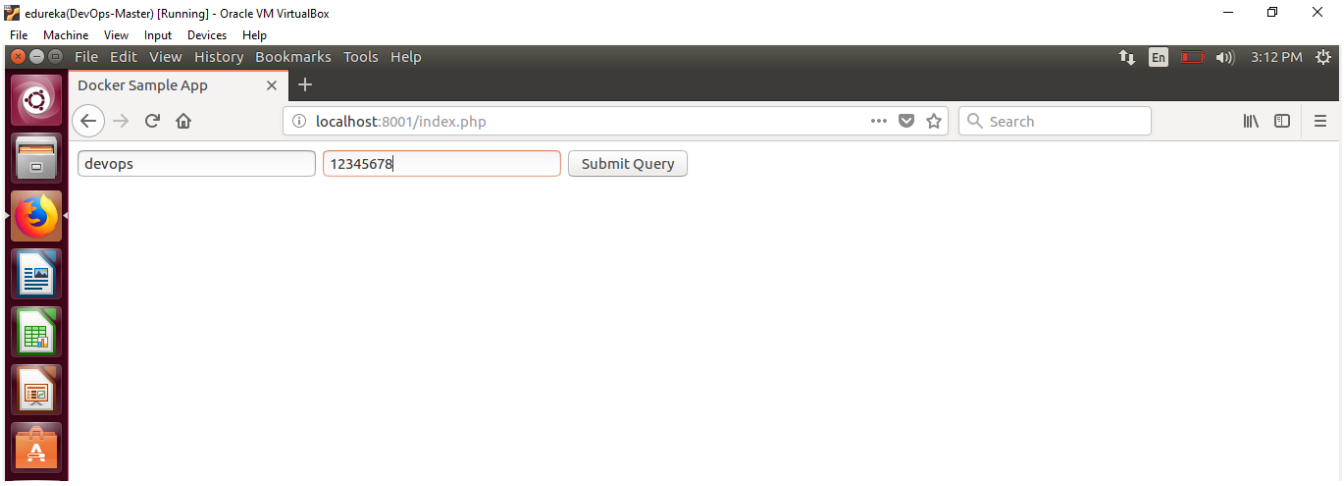
```
mysql> CREATE TABLE emp(name VARCHAR(10), phone VARCHAR(10));
Query OK, 0 rows affected (0.06 sec)
```

Now exit the mysql and container as well.

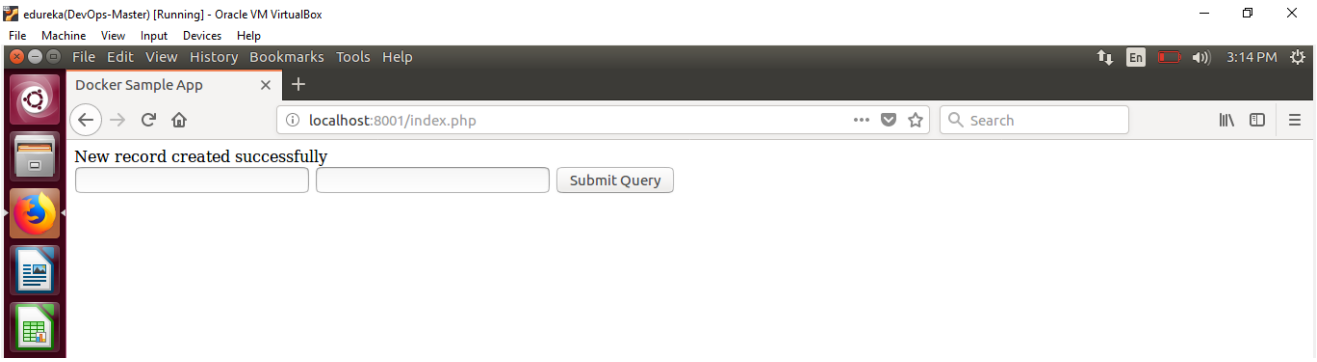
Step 10: Now go to your browser and enter the address as localhost:8001/index.php



You will have to enter the data and click on submit query.



You will see the below message after clicking on submit query .



Now go to that node in which your mysql service is running .

Go inside the container.

```
docker exec -it  container_id bash
mysql  -u root -pedureka
use docker;
show tables;
```

```
select * from emp;
```