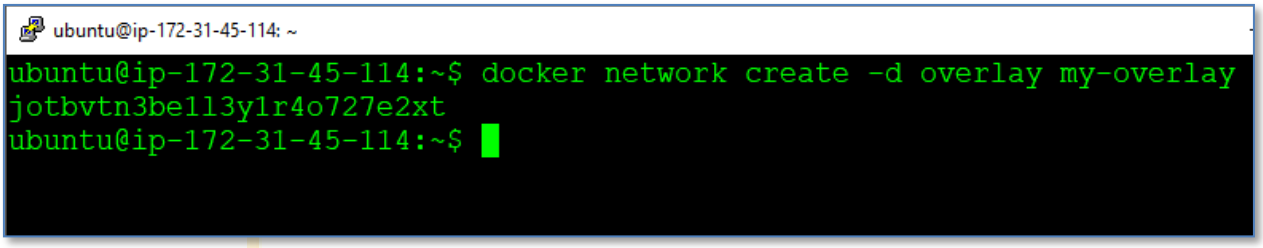
MULTI-TIER APP IN DOCKER SWARM

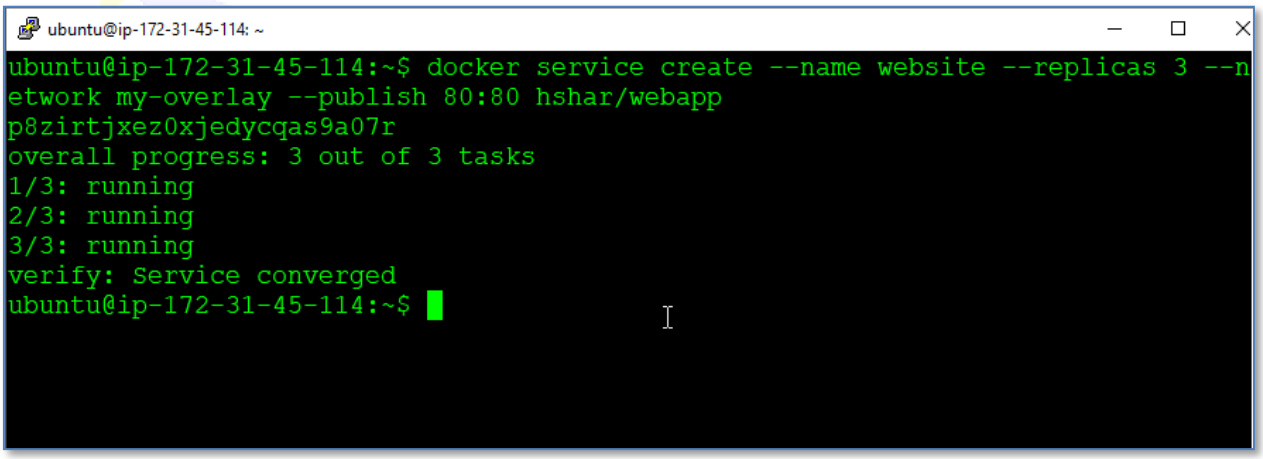
Step 1: Create a Docker Network, of type overlay

```
$ docker network create –d overlay my-overlay
```

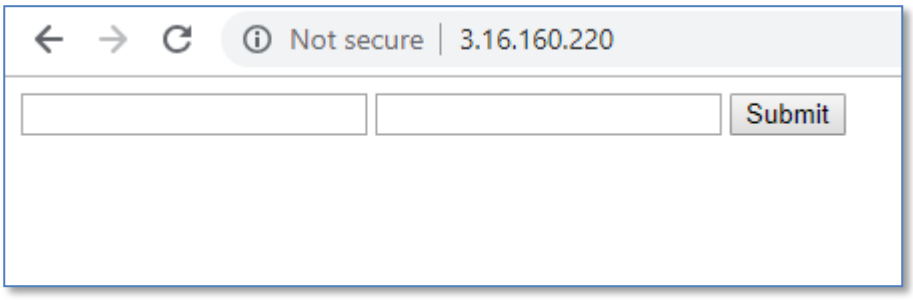


Step 2: Now, let's create the webapp service

```
$ docker service create --name website --replicas 3 –network my-overlay --publish 80:80
hshar/webapp
```

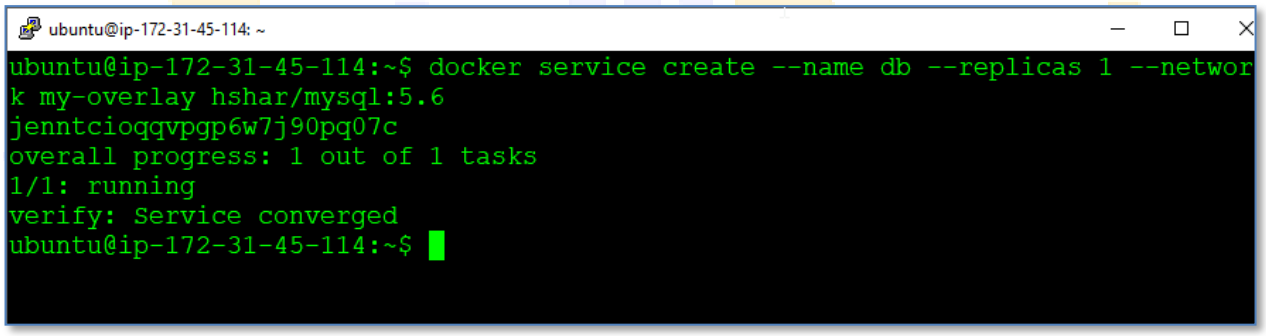


Step 3: Let us try running the website in our browser



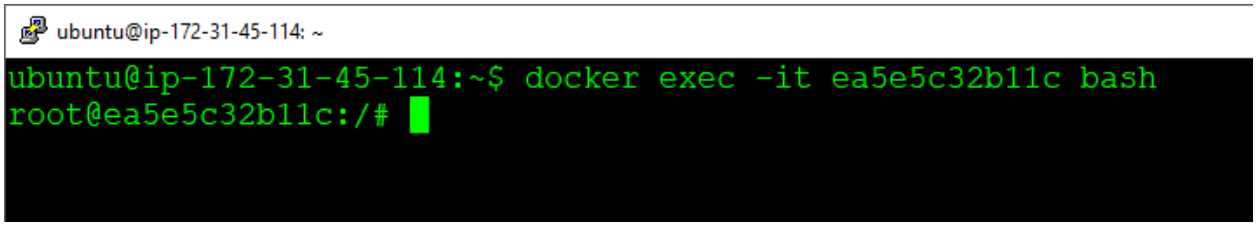
Step 4: Now, let us deploy the DB service

```
$ docker service create --name db --replicas 1 --network my-overlay hshar/mysql:5.6
```



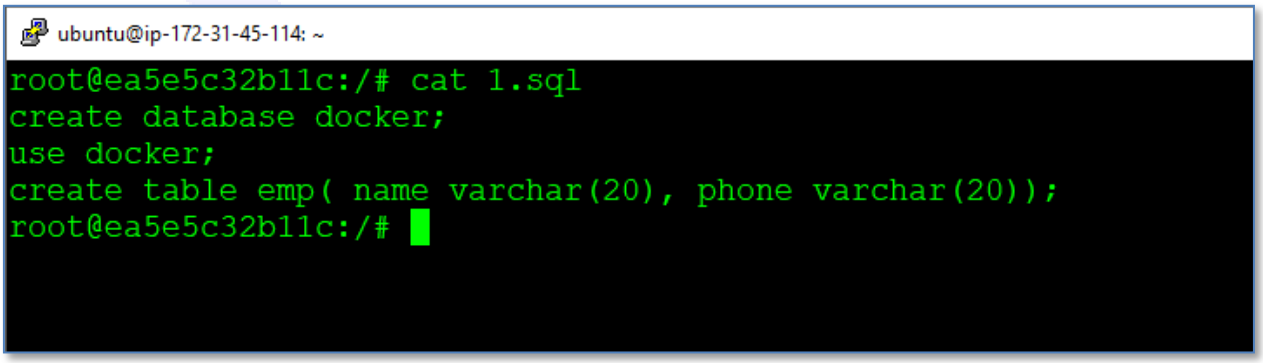
Step 5: Let us exec into the db container now, you will have to check on which node the mysql container is present, accordingly do an exec on that container

```
$ docker exec –it <container-id> bash
```



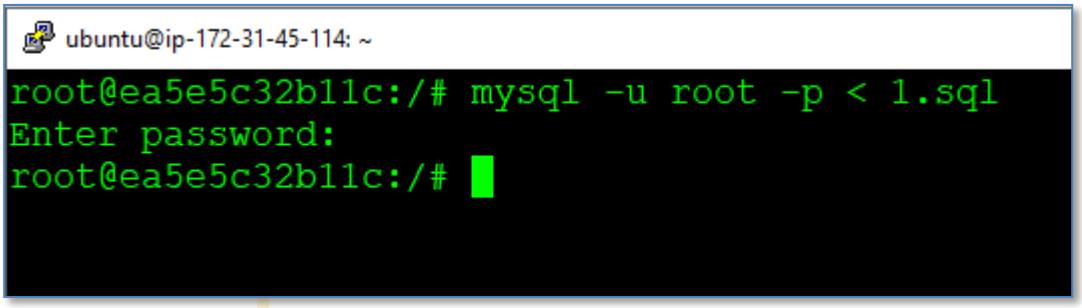
Step 6: Finally create a 1.sql file in this container with the following contents:

```
Create database docker;

Use docker;

Create table emp(name varchar(20), phone varchar(20));
```



Step 7: Pass the following command, and this shall build your database and table. The password for mysql is “intelli” and username is “root”.

```
mysql –u root –p < 1.sql
```



Step 8: Finally check the website, by entering data, and verifying whether your MySQL table is being populated.