

DAY 1 Tasks – Minikube Installation, Mysql Images over docker-compose

Commands:

- curl -LO <https://dl.k8s.io/release/v1.32.0/bin/linux/amd64/kubectl>
- sudo install -o root -g root -m 0755 kubectl /usr/local/bin/kubectl
- chmod +x kubectl
- mkdir -p ~/.local/bin
- mv ./kubectl ~/.local/bin/kubectl
- kubectl version --client
- curl -LO https://github.com/kubernetes/minikube/releases/latest/download/minikube-linux-amd64
- sudo install minikube-linux-amd64 /usr/local/bin/minikube && rm minikube-linux-amd64
- minikube start
- minikube status
- kubectl get pod
- kubectl get deploy
- kubectl get replica
- kubectl get pod -o wide

Docker-compose.yml:

version: '3'

services:

web:

image: nginx:latest

ports:

- 80:80

db:

image: mysql:latest

environment:

- MYSQL\_ROOT\_PASSWORD=secret

- docker exec -it ragulandiran-db-1 /bin/bash
- mysql -u root -p

```
ragu_ubuntu@Kavin: ~  
GNU nano 7.2 docker-compose.yaml  
version: '3'  
  
services:  
  web:  
    image: ragu162004/webpp:latest  
    ports:  
      - 80:80  
  
  db:  
    image: mysql:latest  
    environment:  
      - MYSQL_ROOT_PASSWORD=secret
```

```
ragu_ubuntu@Kavin: ~  
sudo apt install mariadb-client-core # version 1:10.11.8-0ubuntu0.24.04.1  
ragu_ubuntu@Kavin: ~$ sudo nano docker-compose.yaml  
ragu_ubuntu@Kavin: ~$ docker exec -it ragu_ubuntu_db_1 /bin/bash  
Error response from daemon: container e44193e141dfac6004f6aef9e4d1b15942d7fd8d7b6c50ec819fe5be476c9ff4 is not running  
ragu_ubuntu@Kavin: ~$ docker-compose up -d  
Starting ragu_ubuntu_db_1 ... done  
Starting ragu_ubuntu_web_1 ... done  
ragu_ubuntu@Kavin: ~$ docker exec -it ragu_ubuntu_db_1 /bin/bash  
bash-5.1# mysql -u root -p  
Enter password:  
Welcome to the MySQL monitor.  Commands end with ; or \g.  
Your MySQL connection id is 9  
Server version: 9.2.0 MySQL Community Server - GPL  
  
Copyright (c) 2000, 2025, Oracle and/or its affiliates.  
  
Oracle is a registered trademark of Oracle Corporation and/or its  
affiliates. Other names may be trademarks of their respective  
owners.  
  
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  
  
mysql> ^C  
mysql> exit  
Dye  
bash-5.1# exit  
exit  
ragu_ubuntu@Kavin: ~$ ls  
docker-compose.yaml  
ragu_ubuntu@Kavin: ~$ sudo nano pod.yaml  
ragu_ubuntu@Kavin: ~$ sudo cat pod.yaml  
apiVersion: v1  
kind: Pod  
metadata:  
  name: my-app  
spec:  
  containers:  
    - name: my-app-container
```

```
ragu_ubuntu@Kavin: ~$ scale
scale      Set number of containers for a service
start      Start services
stop       Stop services
top        Display the running processes
unpause    Unpause services
up         Create and start containers
version    Show version information and quit
ragu_ubuntu@Kavin:~$ docker-compose images

```

Container	Repository	Tag	Image Id	Size
ragu_ubuntu_db_1	mysql	latest	fa262c3a6564	797 MB
ragu_ubuntu_web_1	nginx	latest	53a18edff809	192 MB

```
ragu_ubuntu@Kavin:~$ docker-compose up -d
Starting ragu_ubuntu_db_1 ... done
Starting ragu_ubuntu_web_1 ... done
ragu_ubuntu@Kavin:~$ docker exec -it ragu_ubuntu_db_1 /bin/bash
bash-5.1# mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 9
Server version: 9.2.0 MySQL Community Server - GPL

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
```