











Kubernetes install

  `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`

  minikube installation

  `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`

docker

`# sudo apt install docker.io -y`

```
# sudo service docker restart
```

```
# sudo service docker status
```

```
# sudo usermod -aG docker $USER
```

```
docker images
```

```
docker ps
```

```
# sudo chmod 666 /var/run/docker.sock
```

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 david-db-1 /bin/bash

  mysql -u root -p



  sudo apt install docker-compose -y



  download docker compose



  sudo curl -L

"https://github.com/docker/compose/releases/latest/download/docker-compose-\$(uname -s)-\$(uname -m)" -o /usr/local/bin/docker-compose

Docker-compose commands



  sudo nano docker-compose.yaml



  docker-compose up -d

    mysql -u root -p

    password

  docker-compose images

  docker-compose ps

  docker-compose down

```

ananth@DESKTOP-LQBQG2D:~$ docker-compose up -d
Creating network "ananth_default" with the default driver
Pulling web (ananth1501/simpleapplication:...)
latest: Pulling from ananth1501/simpleapplication
5a7813e071bf: Pull complete
8dbbbc6af9dc: Pull complete
a10b6847b9f1: Pull complete
dcc1c5ea3c7d: Pull complete
91e6cc55403a: Pull complete
bbbc5226420a: Pull complete
4f4fb700ef54: Pull complete
865114aeca46: Pull complete
429752ed5e84: Pull complete
Digest: sha256:1e7a64d4f2b24daf27d5154454704d07790c826c99f18266a1cb586f61d8f873
Status: Downloaded newer image for ananth1501/simpleapplication:latest
Creating ananth_web_1 ... done
Creating ananth_db_1 ... done
ananth@DESKTOP-LQBQG2D:~$ docker exec -it ananth_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> exit
Bye
bash-5.1# exit
exit
ananth@DESKTOP-LQBQG2D:~$ docker-compose images

```

Container	Repository	Tag	Image Id	Size
ananth_db_1	mysql	latest	fa262c3a6564	797 MB
ananth_web_1	ananth1501/simpleapplication	latest	66bf48d2d3b0	520 MB

```

ananth@DESKTOP-LQBQG2D:~$ docker-compose ps

```

Name	Command	State	Ports
ananth_db_1	docker-entrypoint.sh mysqld	Up	3306/tcp, 33060/tcp
ananth_web_1	catalina.sh run	Up	0.0.0.0:80->80/tcp, :::80->80/tcp, 8080/tcp

```

ananth@DESKTOP-LQBQG2D:~$ docker-compose down
Stopping ananth_db_1 ... done
Stopping ananth_web_1 ... done
Removing ananth_db_1 ... done
Removing ananth_web_1 ... done
Removing network ananth_default
ananth@DESKTOP-LQBQG2D:~$

```