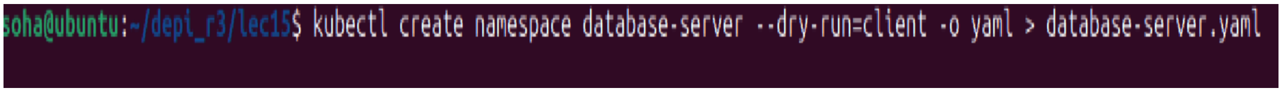
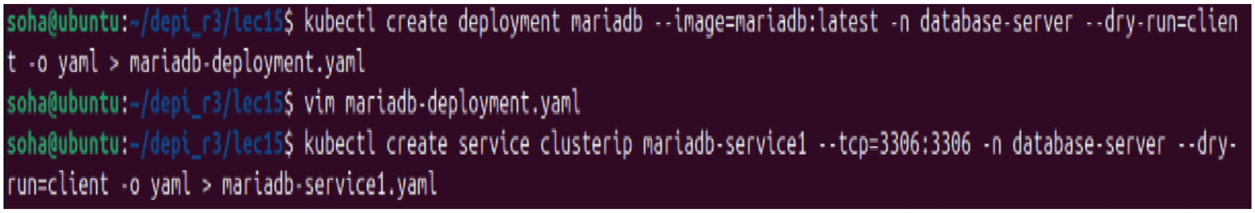
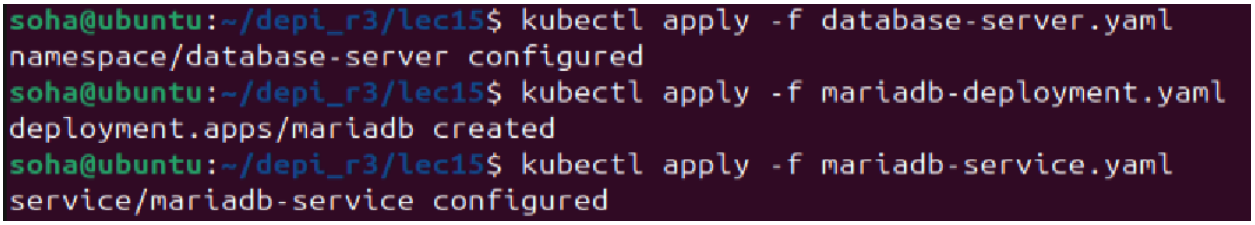
Task 1:



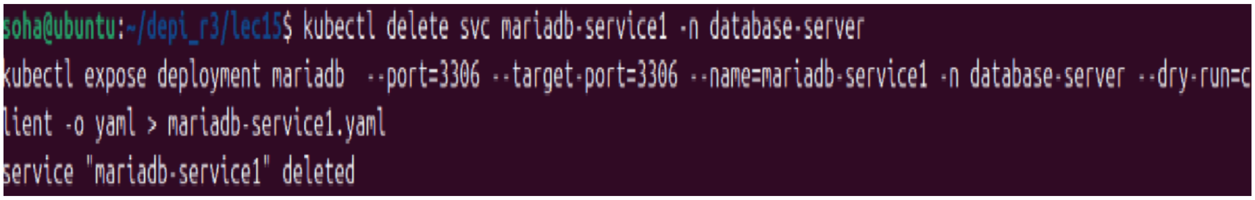
```
soha@ubuntu:~/depi_r3/lec15$ kubectl create namespace database-server --dry-run=client -o yaml > database-server.yaml
```



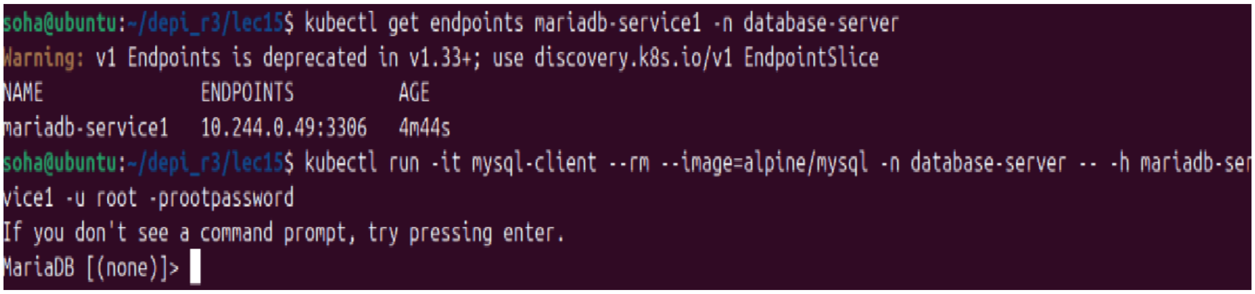
```
soha@ubuntu:~/depi_r3/lec15$ kubectl create deployment mariadb --image=mariadb:latest -n database-server --dry-run=clien
t -o yaml > mariadb-deployment.yaml
soha@ubuntu:~/depi_r3/lec15$ vim mariadb-deployment.yaml
soha@ubuntu:~/depi_r3/lec15$ kubectl create service clusterip mariadb-service1 --tcp=3306:3306 -n database-server --dry-
run=client -o yaml > mariadb-service1.yaml
```



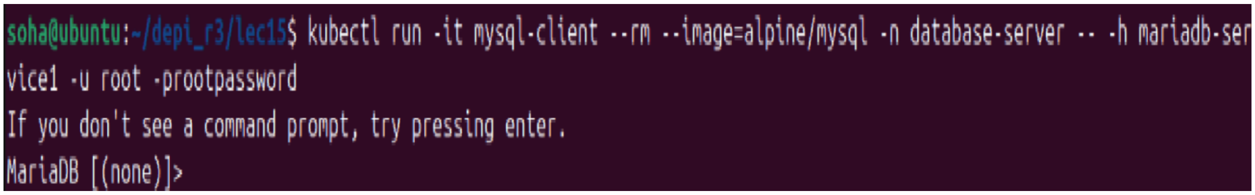
```
soha@ubuntu:~/depi_r3/lec15$ kubectl apply -f database-server.yaml
namespace/database-server configured
soha@ubuntu:~/depi_r3/lec15$ kubectl apply -f mariadb-deployment.yaml
deployment.apps/mariadb created
soha@ubuntu:~/depi_r3/lec15$ kubectl apply -f mariadb-service.yaml
service/mariadb-service configured
```



```
soha@ubuntu:~/depi_r3/lec15$ kubectl delete svc mariadb-service1 -n database-server
kubectl expose deployment mariadb  --port=3306 --target-port=3306 --name=mariadb-service1 -n database-server --dry-run=c
lient -o yaml > mariadb-service1.yaml
service "mariadb-service1" deleted
```

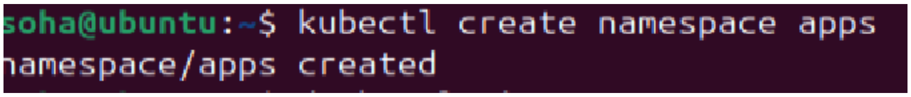


```
soha@ubuntu:~/depi_r3/lec15$ kubectl get endpoints mariadb-service1 -n database-server
Warning: v1 Endpoints is deprecated in v1.33+; use discovery.k8s.io/v1 EndpointSlice
NAME               ENDPOINTS         AGE
mariadb-service1   10.244.0.49:3306  4m44s
soha@ubuntu:~/depi_r3/lec15$ kubectl run -it mysql-client --rm --image=alpine/mysql -n database-server -- -h mariadb-ser
vice1 -u root -prootpassword
If you don't see a command prompt, try pressing enter.
MariaDB [(none)]> 
```

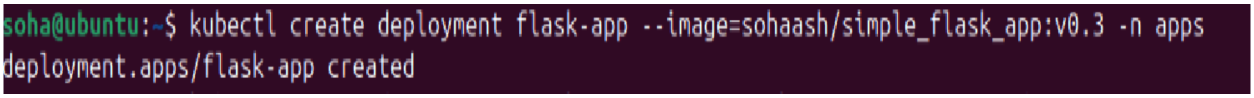


```
soha@ubuntu:~/depi_r3/lec15$ kubectl run -it mysql-client --rm --image=alpine/mysql -n database-server -- -h mariadb-ser
vice1 -u root -prootpassword
If you don't see a command prompt, try pressing enter.
MariaDB [(none)]>
```

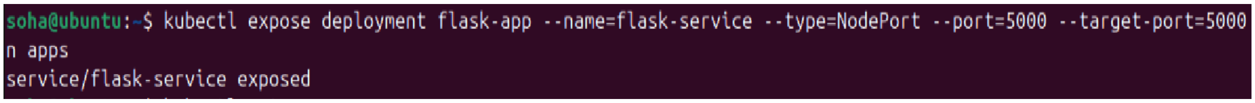
Task 2:



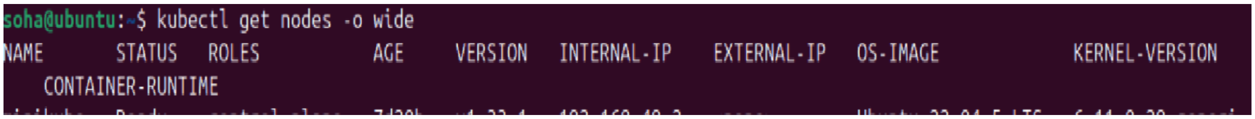
```
soha@ubuntu:~$ kubectl create namespace apps
namespace/apps created
```



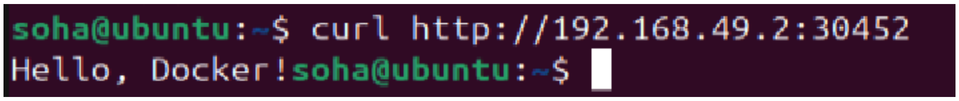
```
soha@ubuntu:~$ kubectl create deployment flask-app --image=sohaash/simple_flask_app:v0.3 -n apps
deployment.apps/flask-app created
```



```
soha@ubuntu:~$ kubectl expose deployment flask-app --name=flask-service --type=NodePort --port=5000 --target-port=5000
n apps
service/flask-service exposed
```



```
soha@ubuntu:~$ kubectl get nodes -o wide
NAME       STATUS   ROLES           AGE    VERSION   INTERNAL-IP    EXTERNAL-IP   OS-IMAGE             KERNEL-VERSION
   CONTAINER-RUNTIME
```



```
soha@ubuntu:~$ curl http://192.168.49.2:30452
Hello, Docker!soha@ubuntu:~$ 
```