Week-7 Day-13 (Kubernetes) → K8S
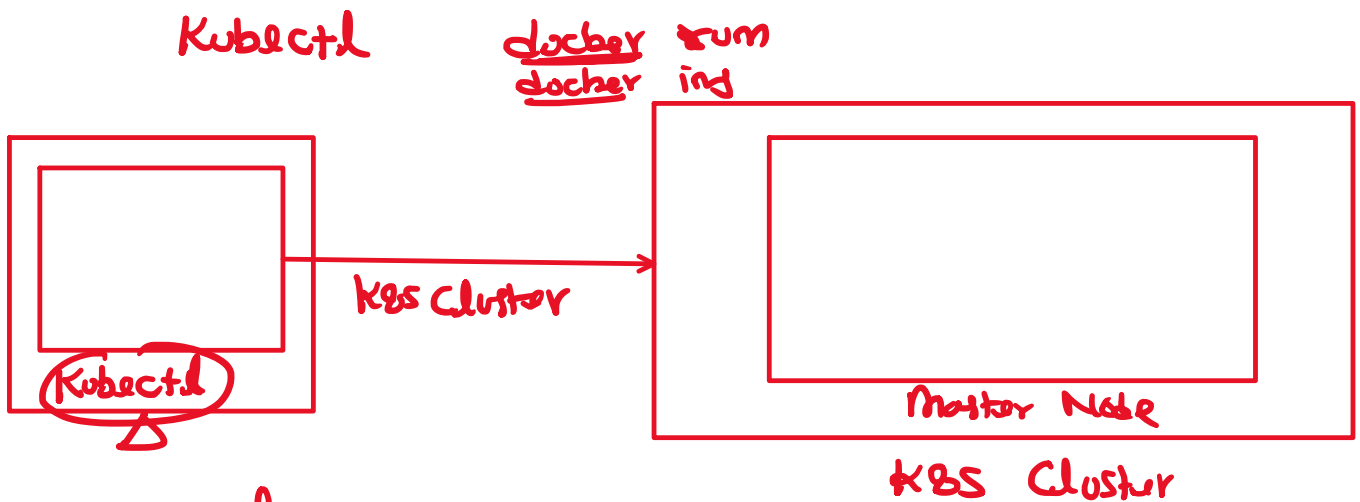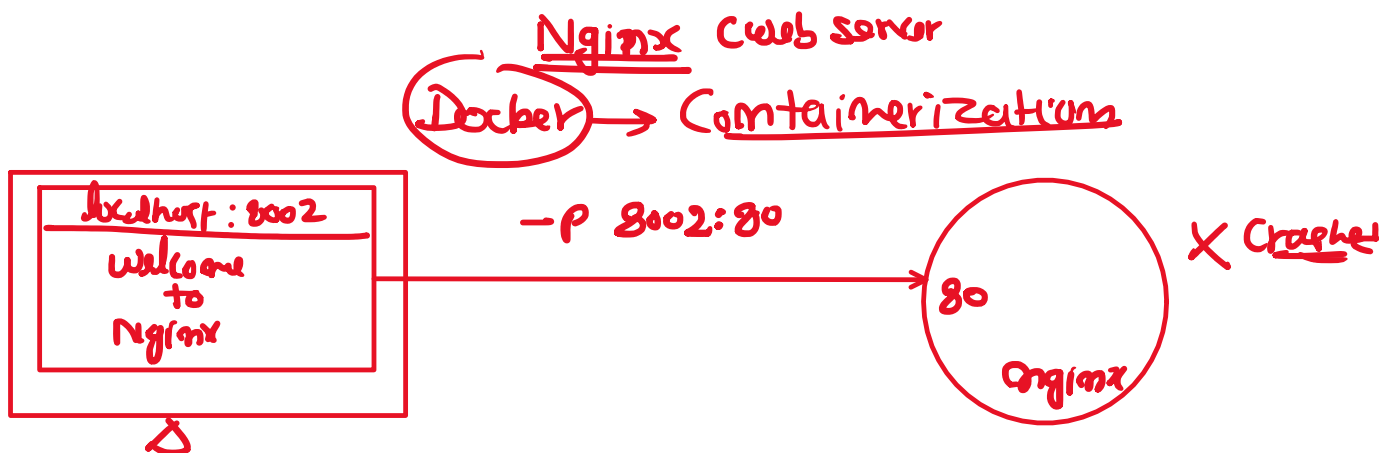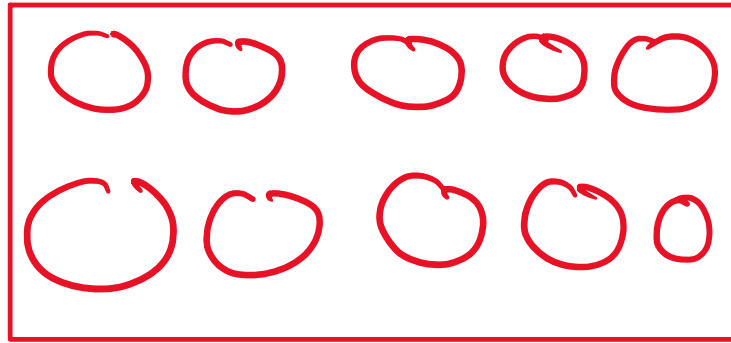
— Installation of Kubernetes

(Single Node)

✓ — Windows / Mac (Docker Desktop) (Kubernetes)

✓ — Linux / Mac / Window (minikube)   (Single Node K8S Cluster)

✓ — (Aws EKS) (Kubernet Cluster (multimode)

Kubectl   docker run
                 docker ing

K8s Cluster →

(Kubectl)

Master Node

K8S Cluster

Kubectl get pods
Kubectl apply

Nginx (web server

(Docker) → Containerization

localhost : 8002
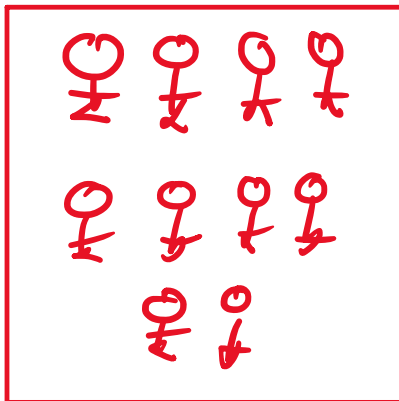Welcome
to
Nginx

—p 8002:80   X Crashed

80

nginx

Container Orchestration

→ Shipping Industry

Music Industry

Orchestration

orchestra

= Master

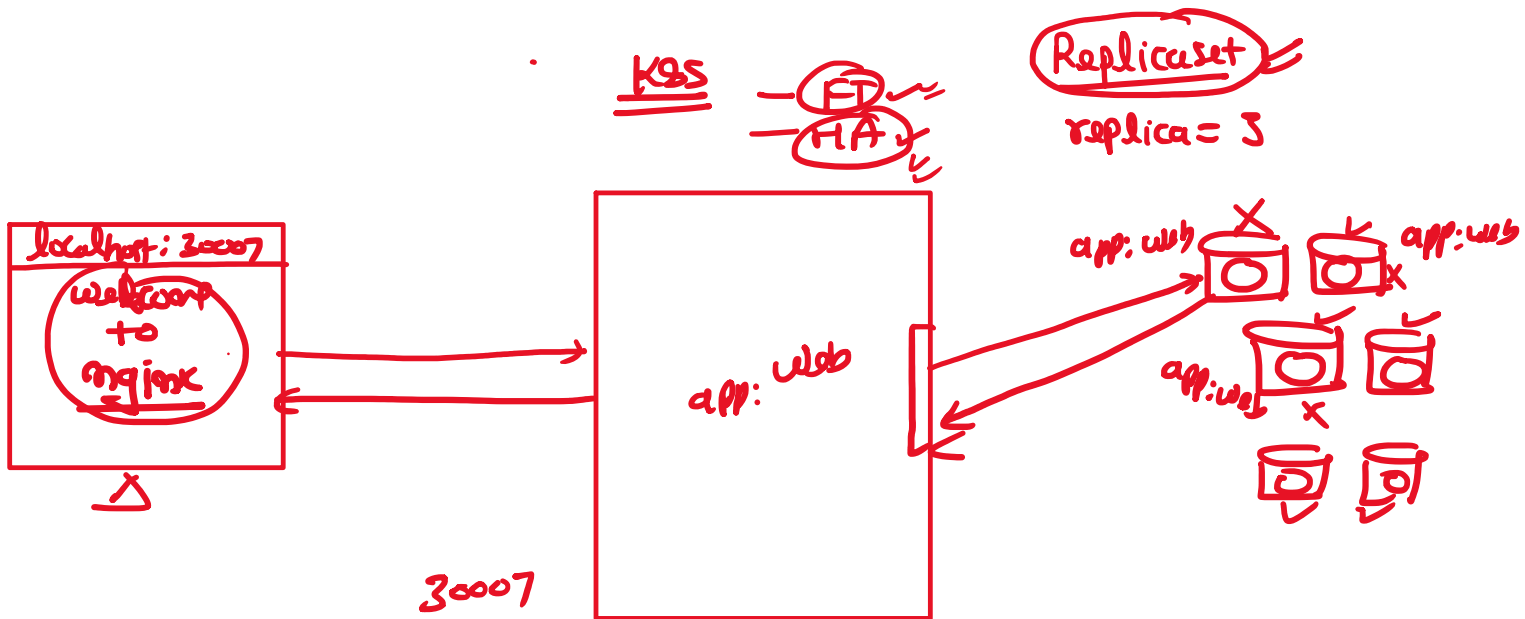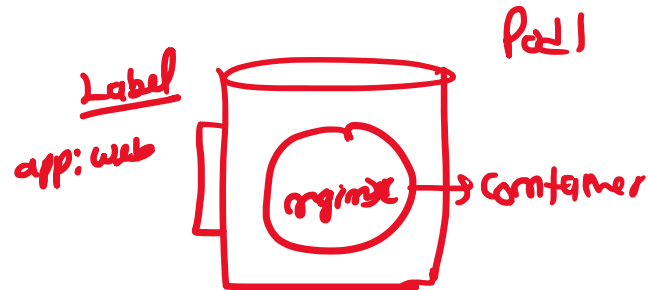Kubernetes
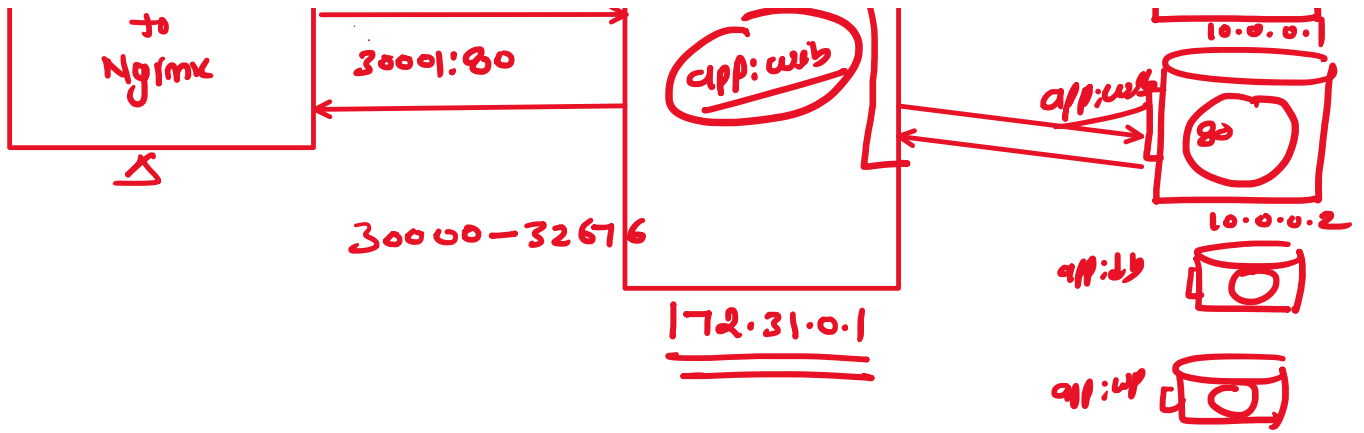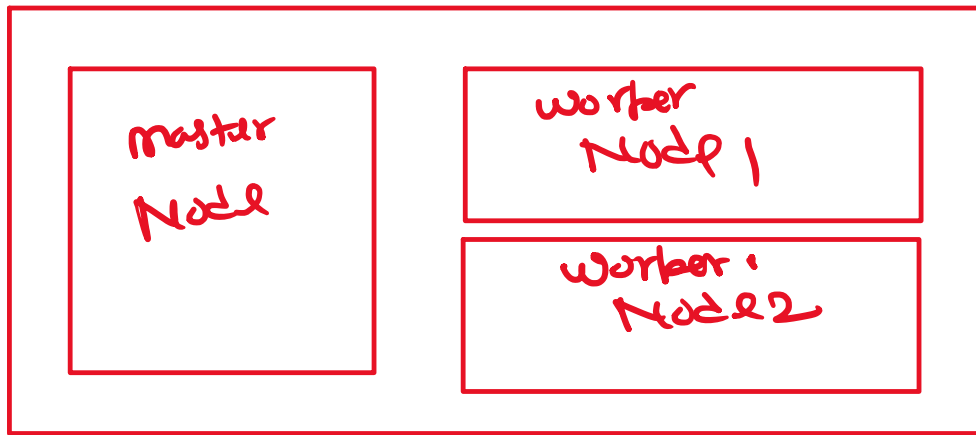
Docker → Containerization → Container

Kubernetes → Container Orchestration → pod
↳ will Contain Container

Service

Pod Label
k:v
app: web

(172.31.0.1)(3000)
Welcome
to
Nginx

3000:80

app: web

Pod1
X

10.0.0.

app: web

to
Nginx

30001:80

app: web

10.0.0.1

80

30000—32676

172.31.0.1

app:db

10.0.0.2

app:db

app:up

Pod 1

Label

app: web

nginx → Container

K8S

FT
HA

Replicaset

replica = 3

localhost : 30007

webapp
to
nginx

app: web

app: web

app: web

app: web

app: web

30007

Master Node | Worker Node 1 / Worker Node 2

Auto Load Balancer

HPA