**Docker:**

- Docker ps

- docker images

- Docker build -t vinayz7/javaimg .

- Docker image:

Java:----

FROM open jdk:11-jdk-slim

WORKDIR /app

COPY target/demo-0.0.1-snapshot.jar app.jar

EXPOSE 8000

ENTRY POINT: [“java” , “-jar” , “app.jar”]

----------------------------------------------------------------

Pyhton :----

From python:3.9-slim

Workdir /app

Copy . /app

Run pip install –no-cache-dir -r requirements.txt

Expose 5000

Cmd [“python” , “app.py” ]

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Docker login -u

Docker push imagename

**Images:**

Vinayz7/nodeimg

Vinayz7/hello1springboot

Vinayz7/my-flask-app

Vinayz7/java-web-app-cicd

Volume:

Service;

Docker service create –name myservice –replicas 3 -p 8080:80 nginx:1.24

Rolling update:

Docker service update --image nginx:1.25 myservice

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**Kubernetes:**

Deployment:

Kubectl create deployment newdeploy –image=vinayz7/nodeimg --port=9091 –dry-run=client -o yaml > deployment.yaml

Svc;

Kubectl expose deployment newdeploy --port=8080 --target-port=9091

--type=Nodeport –dry-run=client -o yaml> service.yaml

**Volume”**

Pv,pvc ,config file

**config map:**

kubectl create configmap mycofig

--from-literal=user=vinay --from-literal=pass=pass66

> kubectl set env deployment/<deployment-name> --from=configmap/<configmap-name>

**Hpa:**

kubectl autoscale deployment depnem --cpu-utilization=50 --min-pods=2 --max-pods=4

**deamonset and statefull set:**

kubectl create deamonset log-agent --image=busybox --dry-run=client -o yaml | kubectl apply -f

kubectl create statefullset --image=nginx --replicas=3 --service=nginx

**rolling upgrade:**

kubectl set image deployment/depname nginx=nginx:1.2

**Jenkins:**

1,freestyle job

2,pipeline

3.shared library

Python :

1,program

Shellscript:

Du -h -directory size

Top -cpu usage

Lscpu-cpu info

Free -h -memory

Lsblk -disk storage