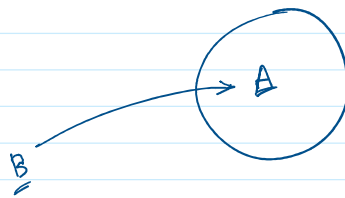
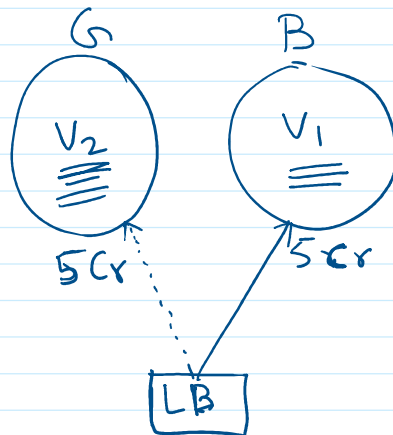


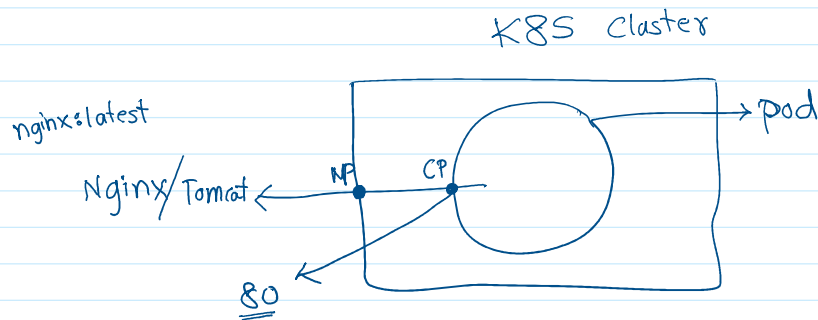
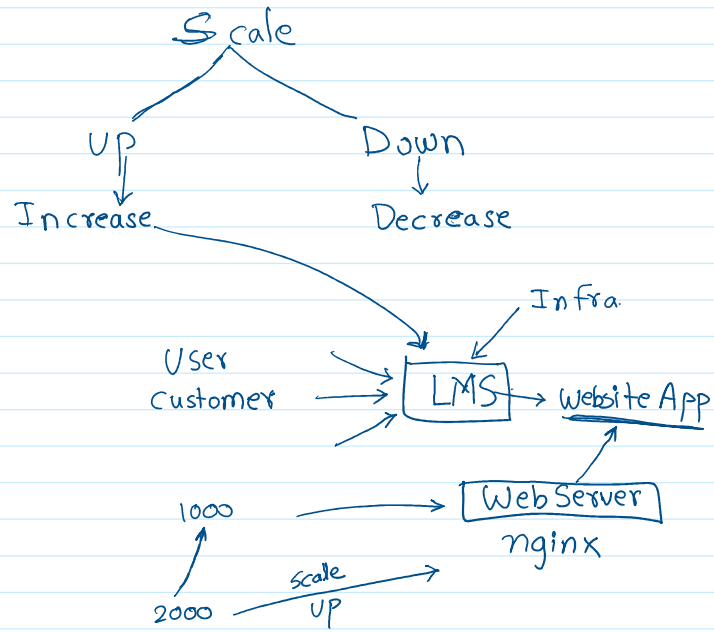
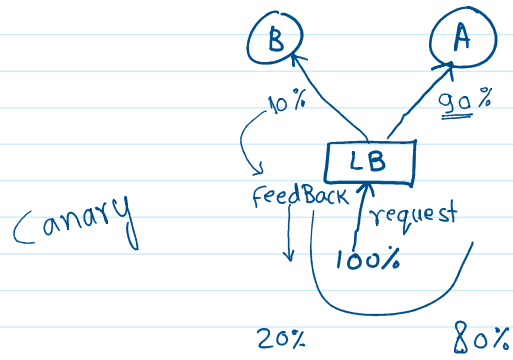
- K8S  
↙
- Deploy Strategies
- Blue/Green = A  
Current Version B  
New Version Blue.
  - Canary =
  - A/B Testing =



### Blue/Green

- Blue = A version = current Version
- Green = B version = Newly Version





Replicas  $\leq \frac{2}{3}$

## YAML

```

- apiVersion: apps/v1
- kind: Deployment
- metadata:
  ===
- spec:
  replicas: 2
  selector
  temp
  spec
  container's
  
```

```

apiVersion: apps/v1
kind: Deployment
  
```

```

metadata:
  name: nginx-deployment
  labels:
    app: nginx
  
```

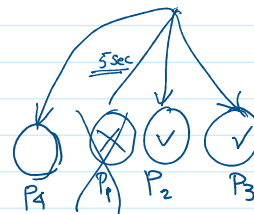
```

spec:
  replicas: 4
  selector:
    matchLabels:
      app: nginx
  template:
    metadata:
      labels:
        app: nginx
    spec:
      containers:
        - name: nginx
          image: nginx:latest # name of image deployed to DockerHub
          ports:
            - containerPort: 80
  
```

- Connect to K8S cluster
- Create deployment (YAML)

- replicas=4
- Image: nginx:latest

- Check get pods, deploy

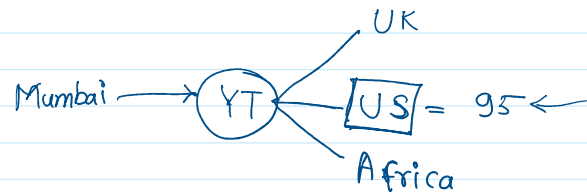
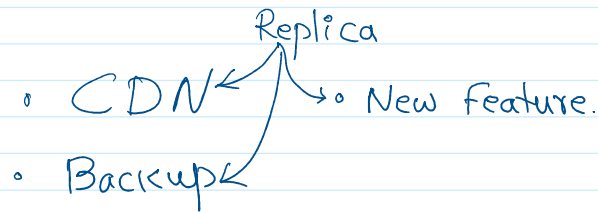


2/2

P1 ---  
P2 ---

- Scale Up

\$ kubectl scale --replicas=3 deployment/nginx-deployment



• wait 1m → no response → Create replicas

\$ kubectl scale --replicas=3 --timeout=1m

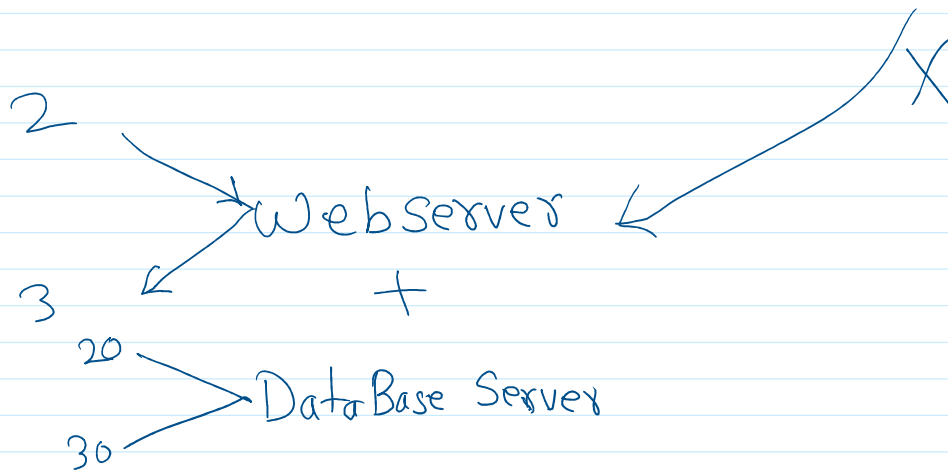
Default = No waiting period

objectType/object.  
↓  
deployment/nginx-deployment  
↓  
webServer.

\$ kubectl get pods

\$ kubectl get deployment.

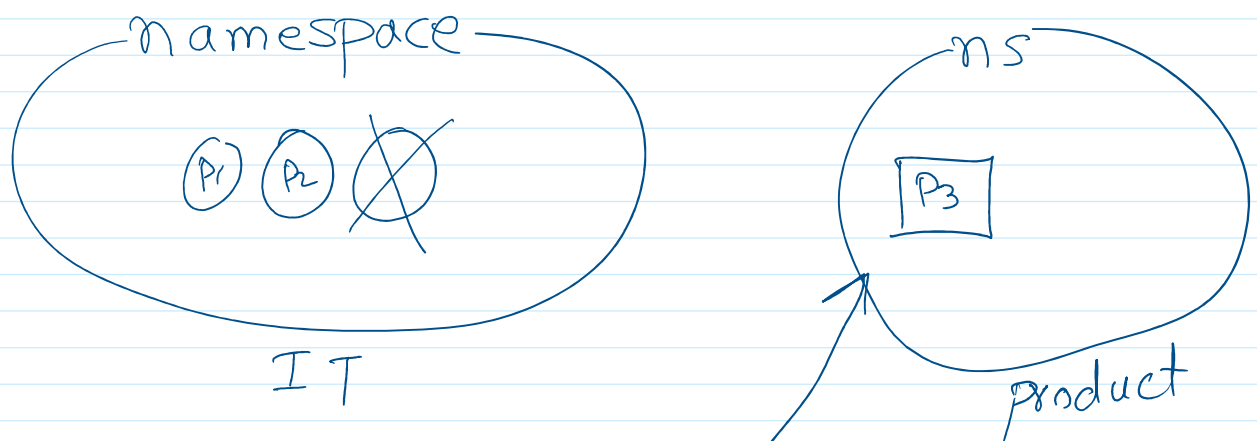
\$ kubectl get pods, deployment.



\$ kubectl scale --replicas=3 -

deployment/webserver

deployment/dbserver ↔



-- namespace = product

```
cd deployment-demo
```

```
$ cat > nginx-deployment.yaml
```

```
apiVersion: apps/v1
kind: Deployment
```

```
metadata:
  name: nginx-deployment
  labels:
    app: nginx
```

```
spec:
  replicas: 4
  selector:
    matchLabels:
      app: nginx
  template:
    metadata:
      labels:
        app: nginx
    spec:
      containers:
        - name: nginx
          image: nginx:latest # name of image deployed to DockerHub
          ports:
            - containerPort: 80
```

```
kubectl apply -f nginx-deployment.yaml
```

```
kubectl get deployments
```

```
kubectl get pods
```

```
$ kubectl scale --replicas=3 deployment/demo-deployment
```

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: demo-deployment
spec:
  replicas: 1
  selector:
    matchLabels:
      app: demo-app
  template:
    metadata:
      labels:
        app: demo-app
    spec:
      containers:
        - name: nginx
          image: nginx:latest
```

```
$ kubectl apply -f demo-deployment.yaml
deployment.apps/demo-deployment created
```

```
$ kubectl scale --current-replicas=3 --replicas=5 deployment/demo-deployment
deployment.apps/demo-deployment scaled
```

```
$ kubectl scale --replicas=5 deployment/app deployment/database
deployment.apps/app scaled
deployment.apps/database scaled
```

```
$ kubectl scale --all --replicas=5 --namespace=default deployment
deployment.apps/app scaled
deployment.apps/database scaled
```

```
$ kubectl scale --replicas=5 --selector=app-name=demo-app deployment
deployment.apps/app scaled
deployment.apps/database scaled
```

```
$ kubectl scale --replicas=5 --timeout=1m deployment/demo-deployment
```