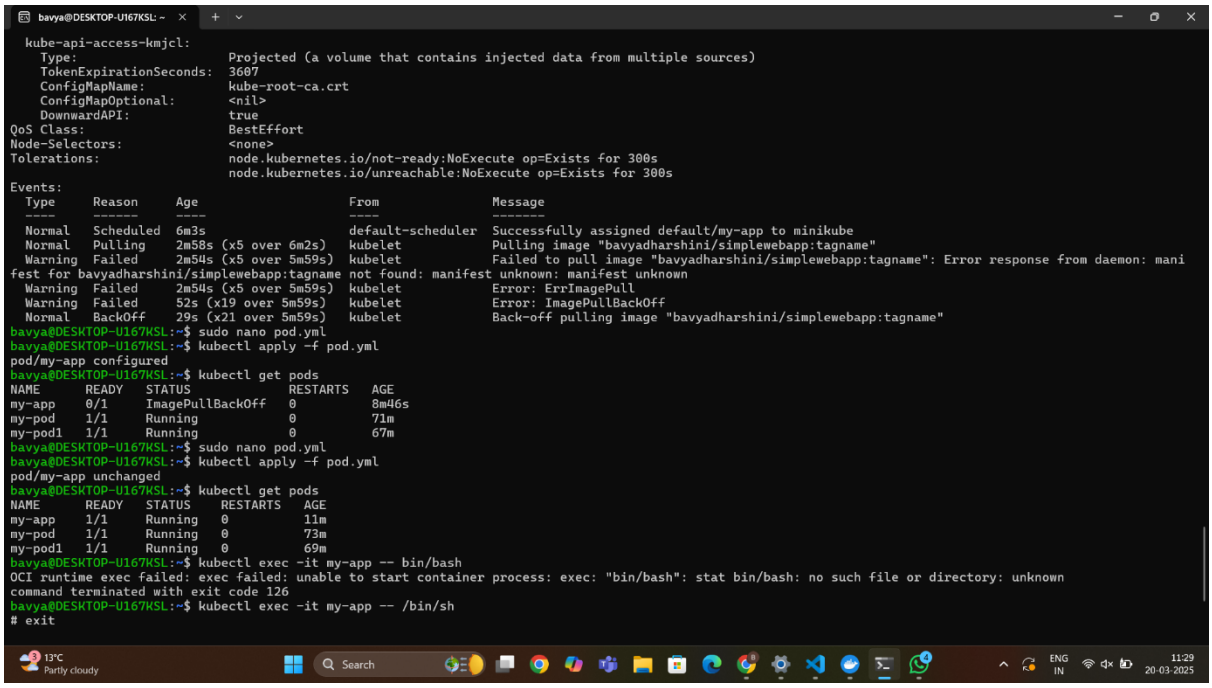
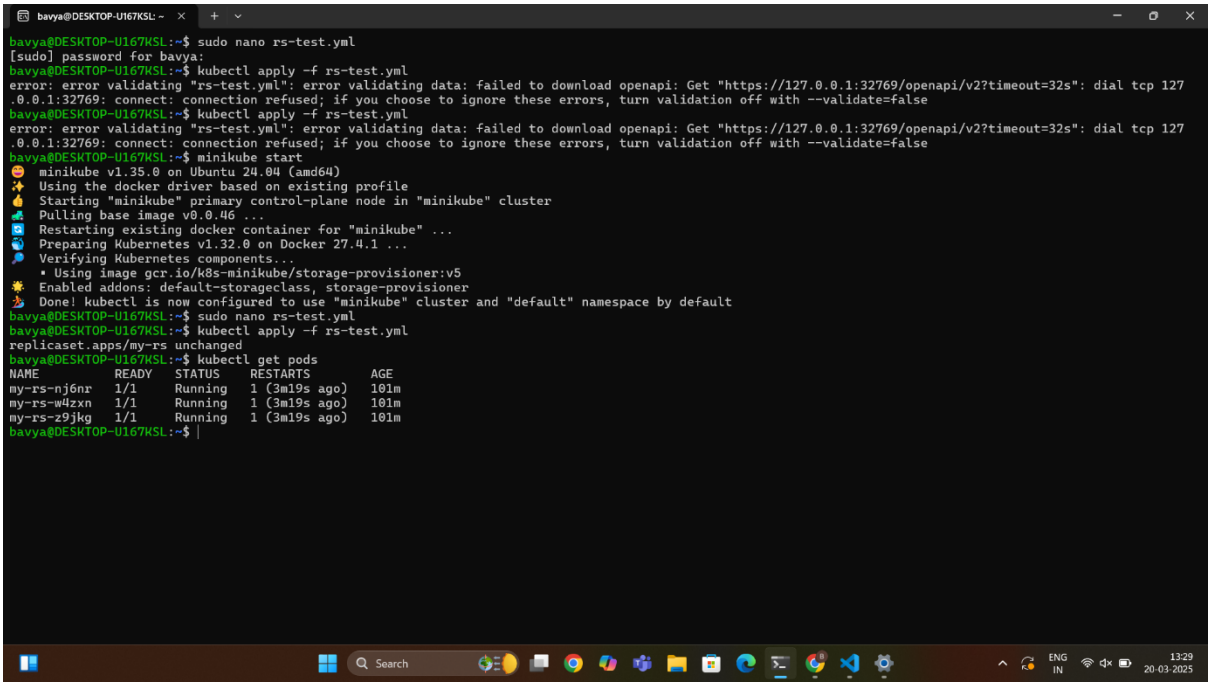
DEVOPS

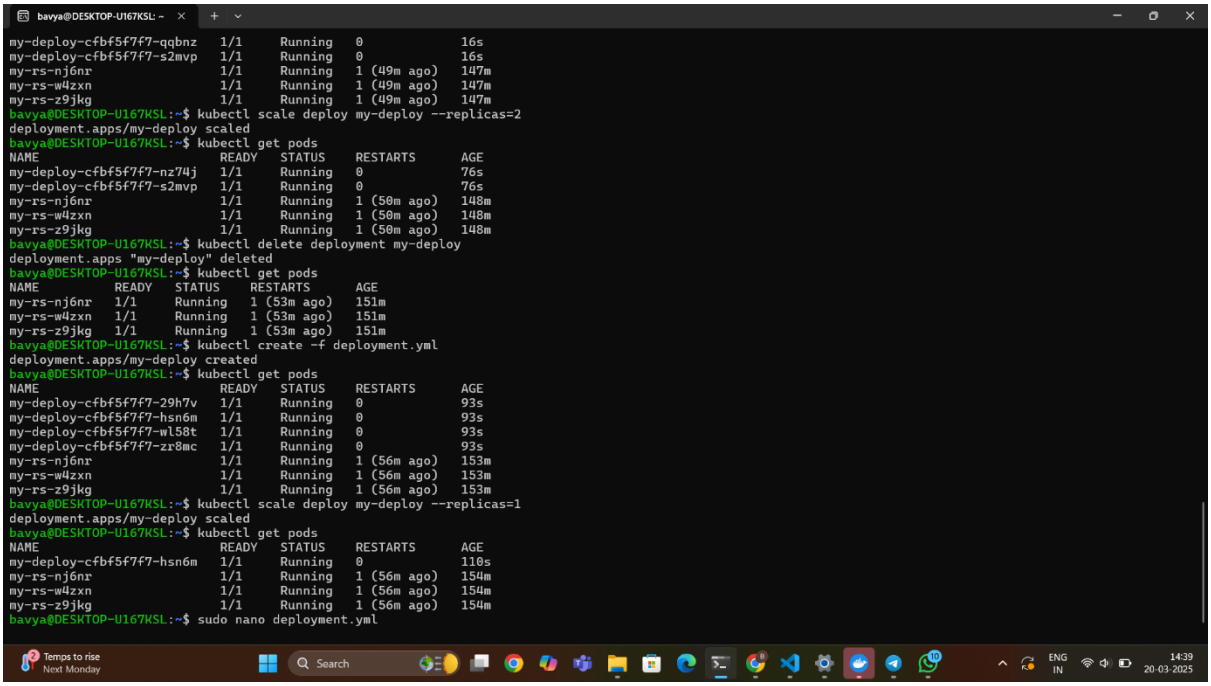
DAY – 4



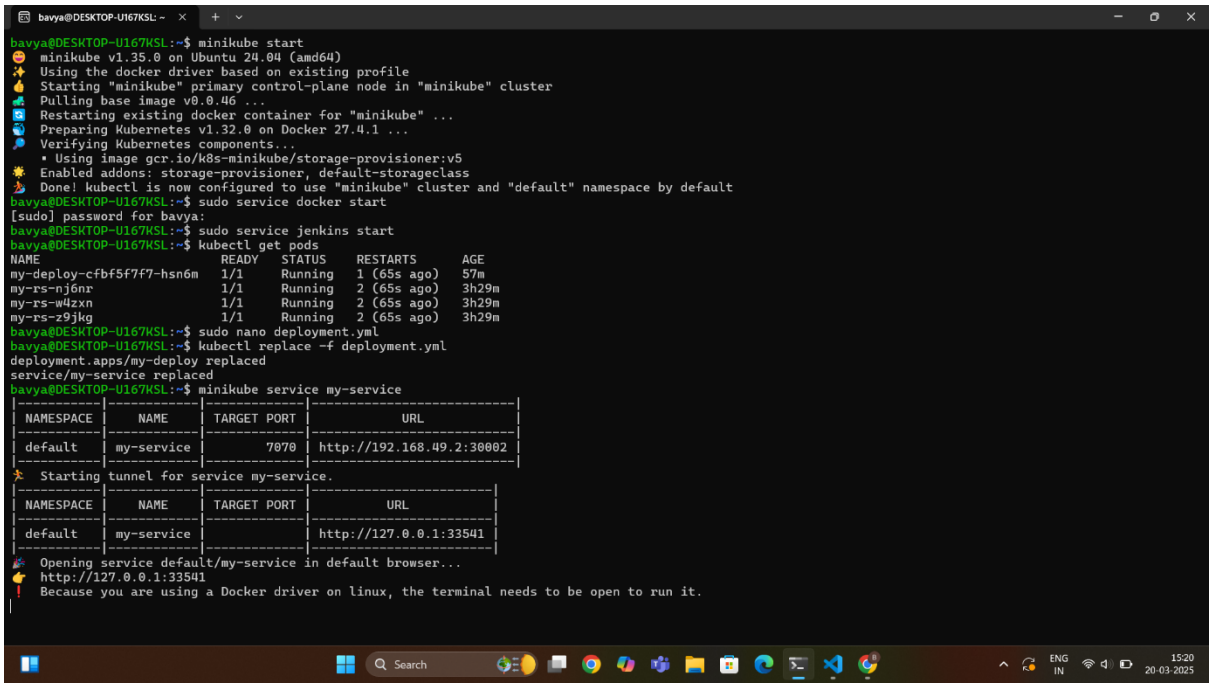
Pod Creation Output



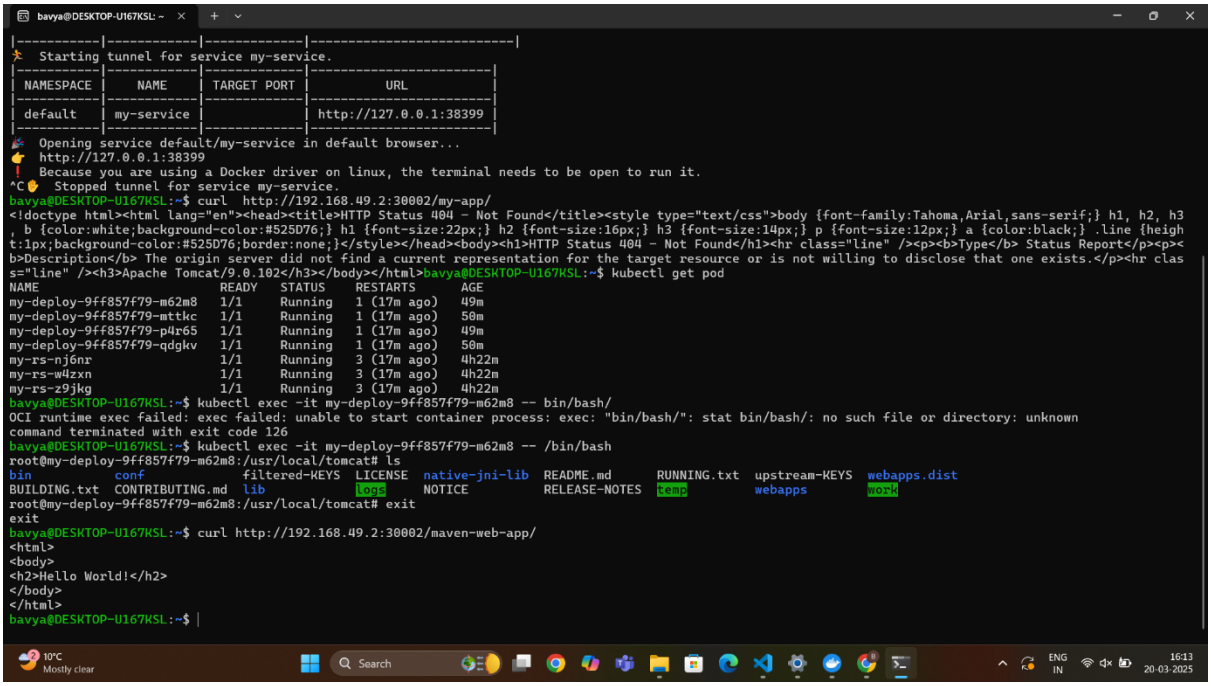
Replicas Output



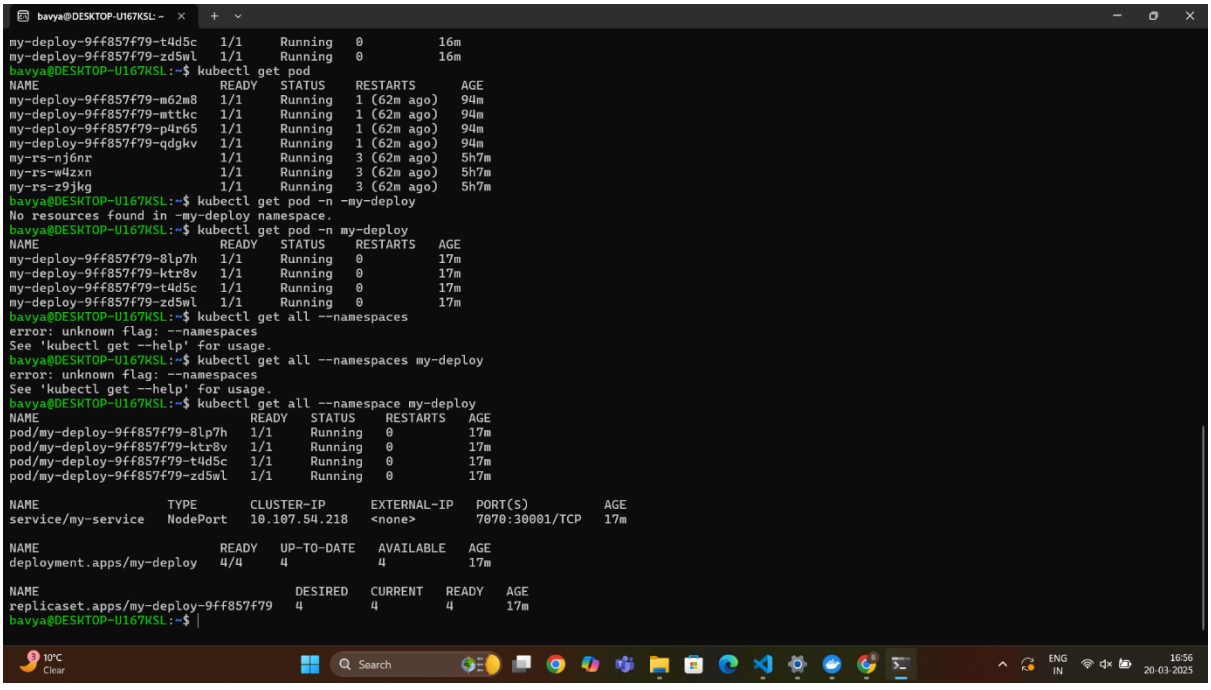
Deployment Creation Output



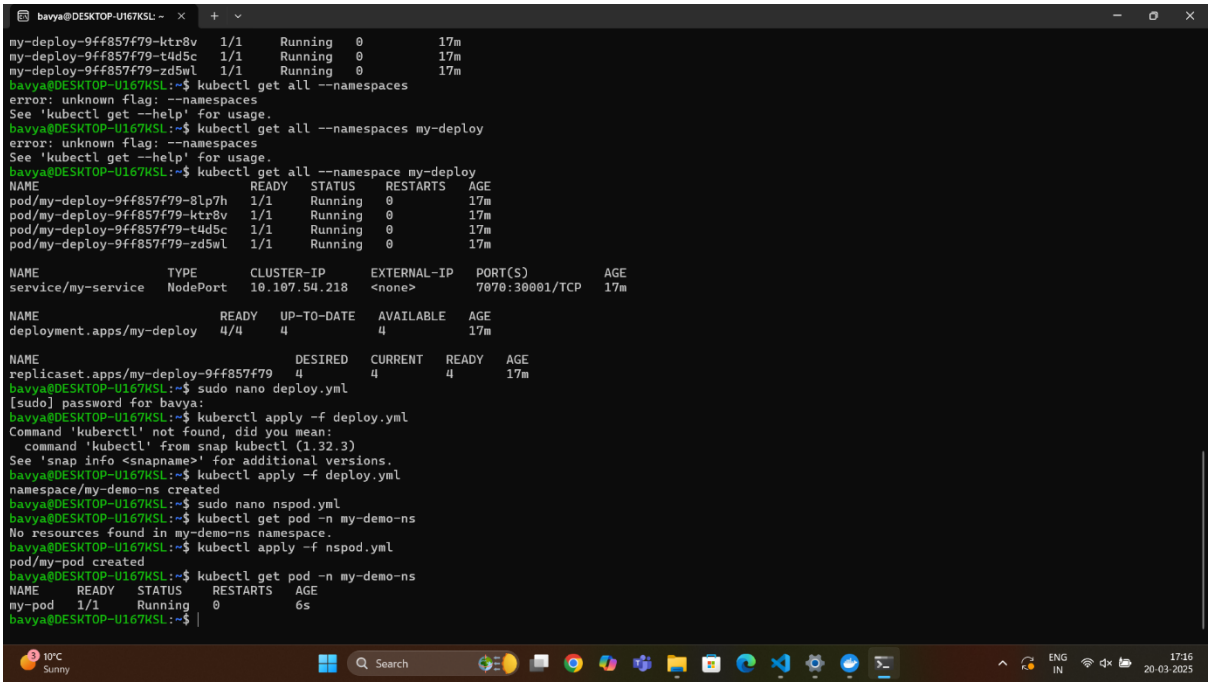
My-Service



My-Service Output



Namespace



Nspod

Pod Creation:

a.

1. minikube start
2. kubectl get pod
3. kubectl delete all --all
4. kubectl run my-pod --image=nginx --port=80
5. kubectl get pod
6. kubectl get pod -o wide
7. kubectl describe my-pod1
8. kubectl exec -it my-pod1 -- bin/bash

pod.yml:

{

```
apiVersion: v1
kind: Pod
metadata:
  name: my-app
spec:
  containers:
    - name: my-app-container
      image: bavyadharshini/simplewebapp:tagname
      ports:
        - containerPort: 9090

}
```

9. kubectl apply -f pod.yml
10. kubectl get pods
11. kubectl exec -it my-app -- /bin/sh

b.

1. minikube ip
2. kubectl get rs
3. kubectl create deployment web-nginx --image=nginx --replicas=1
4. kubectl get deploy
5. kubectl create pod my-pod --image=nginx
6. kubectl delete deployment web-nginx
7. kubectl delete pod my-pod

Replicas Creation:

1. sudo nano rs-test.yml

Yml File:

```
{
apiVersion: apps/v1
kind: ReplicaSet
metadata:
  name: my-rs
  labels:
    name: my-rs
spec:
  replicas: 3
  selector:
    matchLabels:
      apptype: web-backend
  template:
    metadata:
      labels:
        apptype: web-backend
    spec:
      containers:
      - name: my-app
        image: bavyadharshini/simplewebapp:latest
        ports:
          - containerPort: 9099
}
```

2. kubectl apply -f rs-test.yml

3. kubectl get pods

4. kubectl get rs

5. kubectl exec -it my-rs-nj6nr -- /bin/bash

6. kubectl describe pod my-rs-nj6nr

Deployment Creation:

a.

1. sudo nano deployment

Yml File:

```
{
 apiVersion: apps/v1
 kind: Deployment
 metadata:
   name: my-deploy
   labels:
     name: my-deploy
 spec:
   replicas: 4
   selector:
     matchLabels:
       apptype: web-backend
   strategy:
     type: RollingUpdate
   template:
```

```
    metadata:
      labels:
        apptype: web-backend
    spec:
      containers:
      - name: my-app
        image: bavyadharshini/simplewebapp:latest
        ports:
            - containerPort: 7076
}
```

2. kubectl apply -f deployment.yml
3. kubectl get pods
4. kubectl scale deploy my-deploy --replicas=2

b.

1. kubectl create -f deployment.yml
2. kubectl get pods
3. kubectl scale deploy my-deploy --replicas=1
4. kubectl replace -f deployment.yml

My-Service:

1. sudo nano deployment.yml

Yml File:

{

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: my-deploy
  labels:
    name: my-deploy
spec:
  replicas: 1
  selector:
    matchLabels:
      apptype: web-backend
  strategy:
    type: RollingUpdate
  template:
    metadata:
      labels:
        apptype: web-backend
    spec:
      containers:
      - name: my-app
        image:
        ports:
        - containerPort: 7070
---

apiVersion: v1
```

```
kind: Service
metadata:
  name: my-service
  labels:
    app: my-service
    type: backend-app
spec:
  type: NodePort
  ports:
   - targetPort: 7070
     port: 7070
     nodePort: 30002
  selector:
    apptype: web-backend



}
```

2. kubectl replace -f deployment.yml
3. minikube service my-service

Namespace:

1. kubectl get pod -n -my-deploy
2. kubectl get all --namespace my-deploy

Nspod:

1. sudo nano deploy.yml

deploy.yml

```
{
apiVersion: v1
kind: Namespace
metadata:
  name: my-demo-ns
}
```

2. kubectl apply -f deploy.yml

3. sudo nano nspod.yml

nspod.yml

```
{
apiVersion: v1
kind: Pod
metadata:
  name: my-pod
  namespace: my-demo-ns
spec:
  containers:
  - name: my-container
    image: nginx:latest
}
```

4. kubectl apply -f nspod.yml

5. kubectl get pod -n my-demo-ns