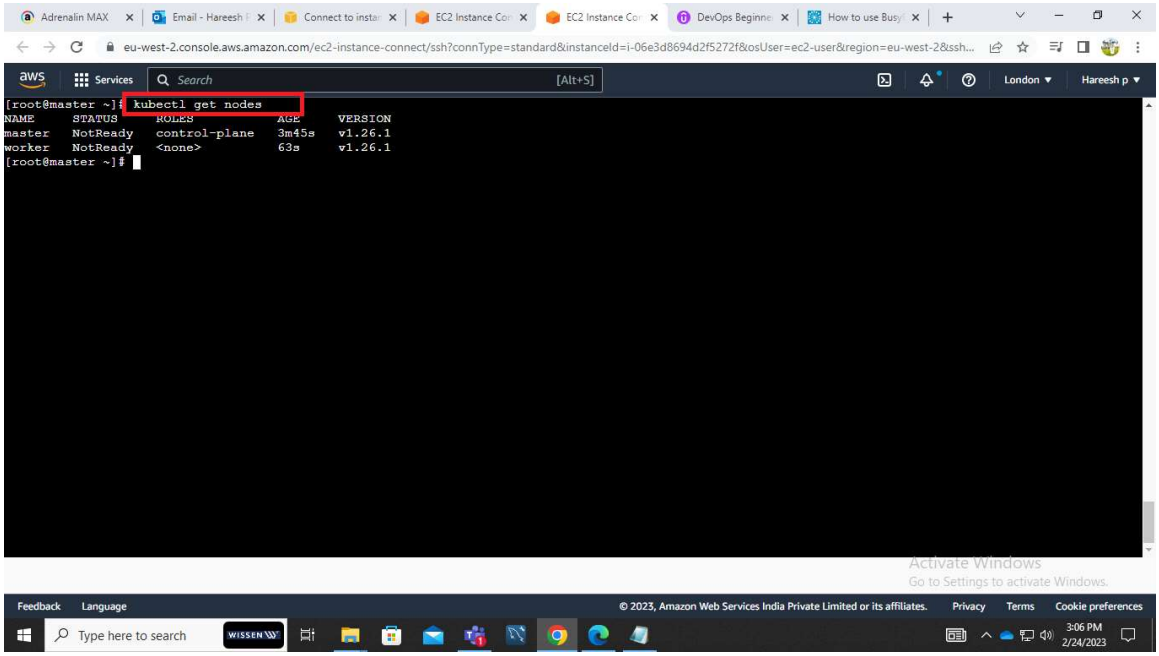
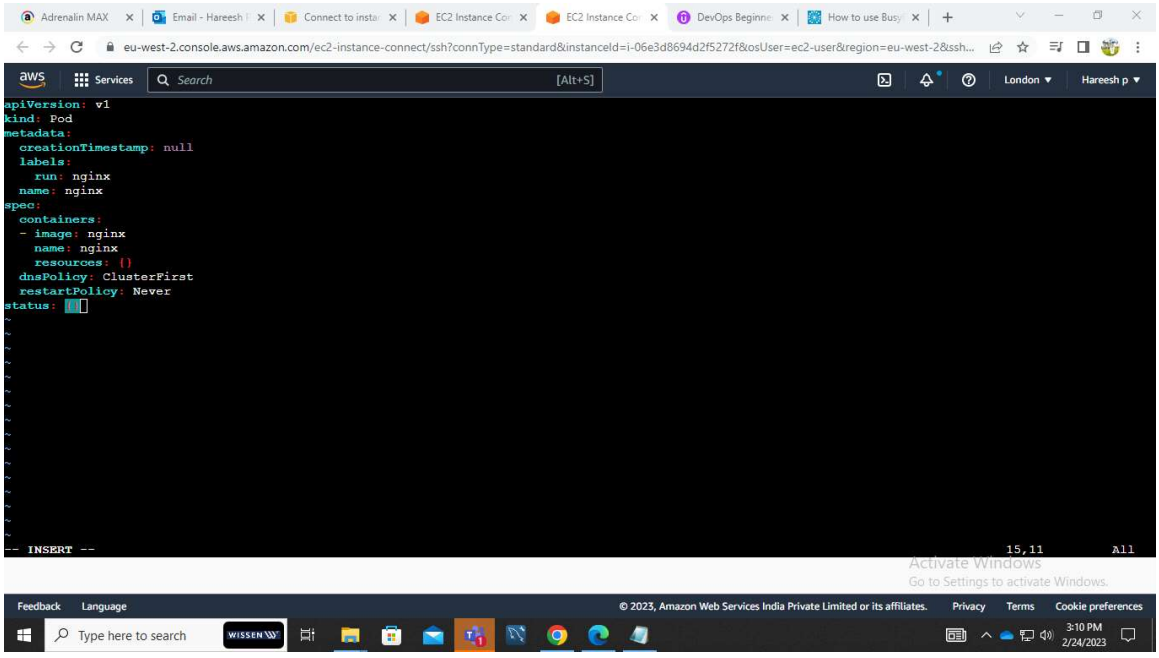
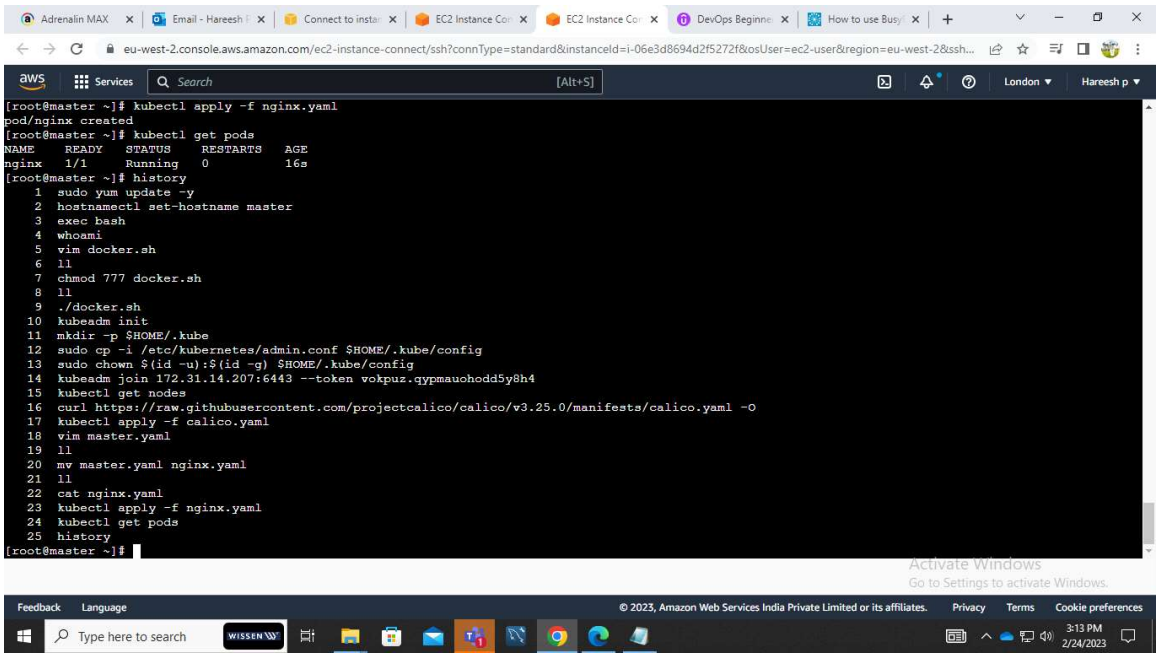
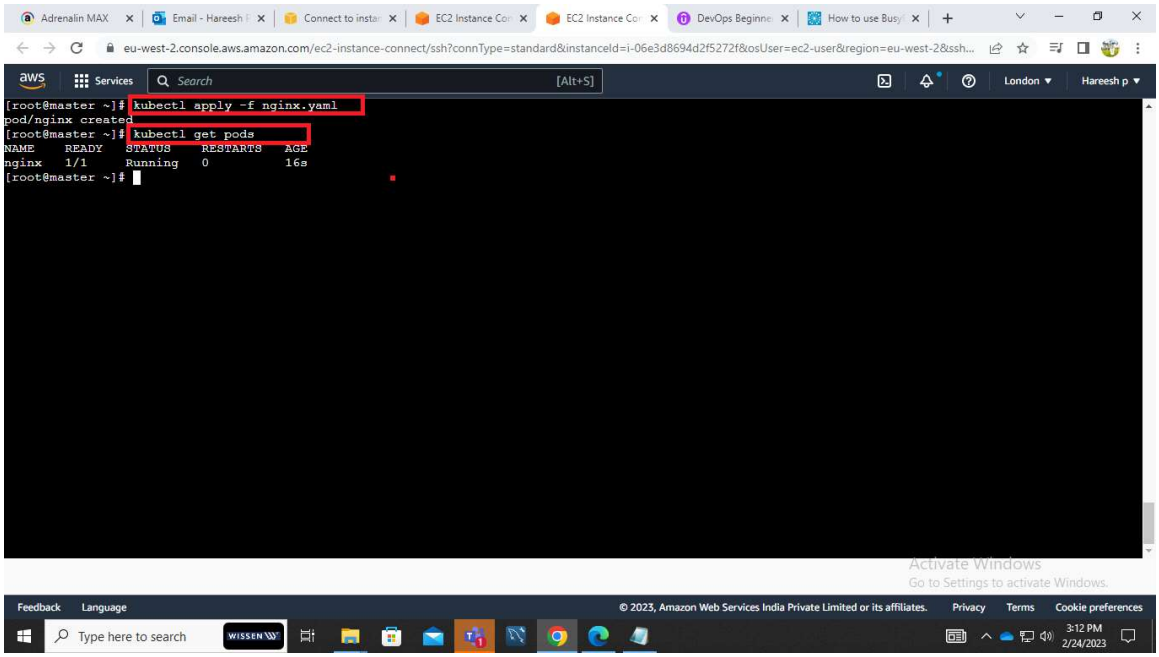
Creation the nginx pod with a yaml file:

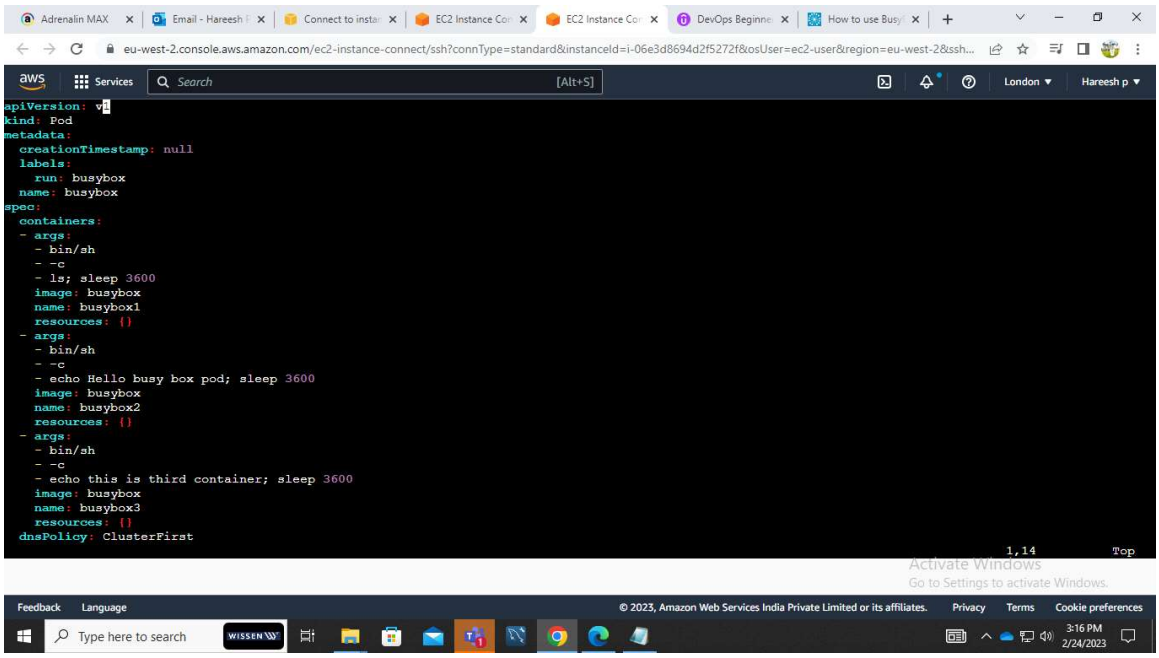




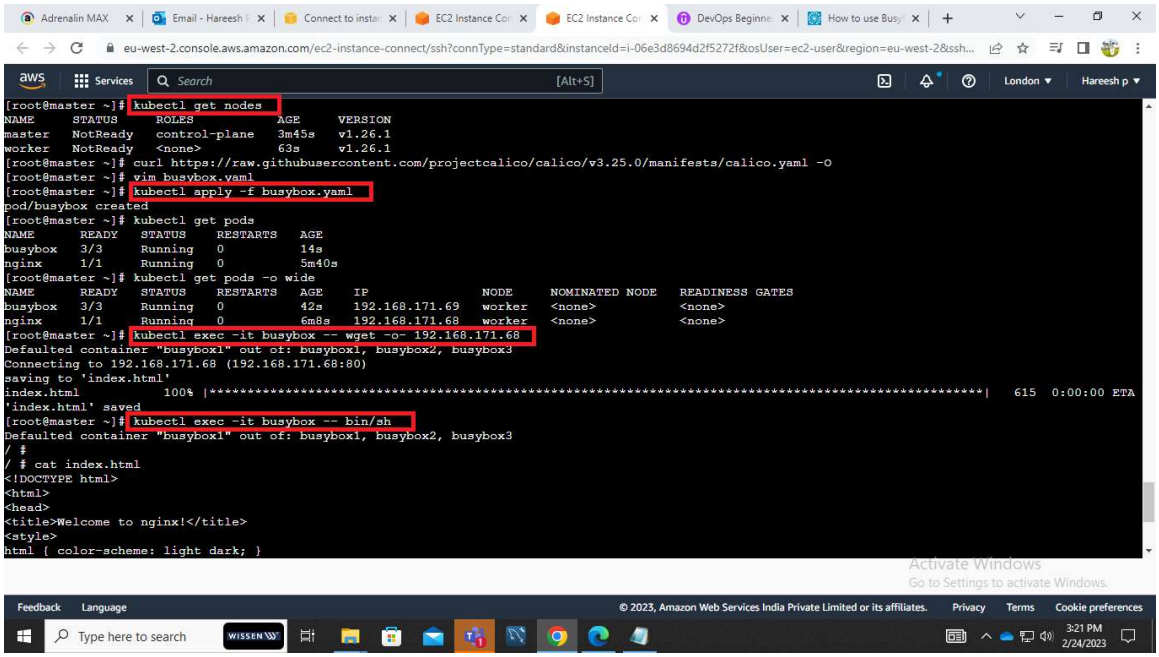




Check the connection of the nginx pod from the busybox pod:



```
apiVersion: v1
kind: Pod
metadata:
  creationTimestamp: null
  labels:
    run: busybox
  name: busybox
spec:
  containers:
  - args:
    - bin/sh
    - -c
    - ls; sleep 3600
    image: busybox
    name: busybox1
    resources: {}
  - args:
    - bin/sh
    - -c
    - echo Hello busy box pod; sleep 3600
    image: busybox
    name: busybox2
    resources: {}
  - args:
    - bin/sh
    - -c
    - echo this is third container; sleep 3600
    image: busybox
    name: busybox3
    resources: {}
  dnsPolicy: ClusterFirst
```

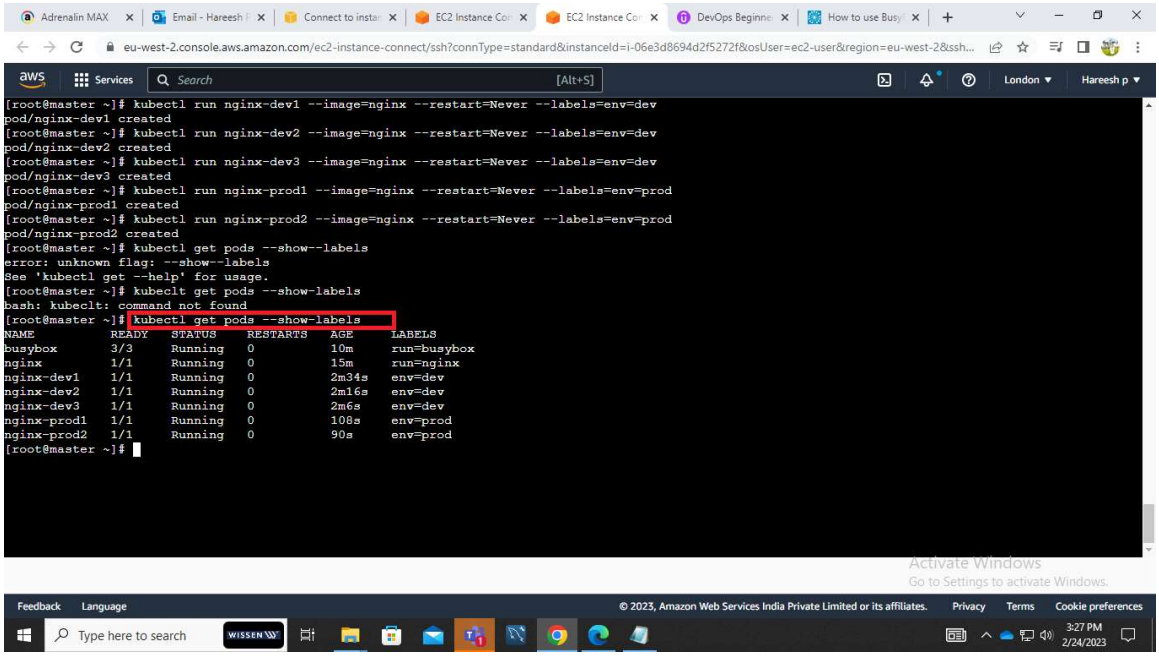


```
[root@master ~]# kubectl get nodes
NAME     STATUS     ROLES           AGE     VERSION
master   NotReady   control-plane   3m45s   v1.26.1
worker   NotReady   <none>          63s     v1.26.1
[root@master ~]# curl https://raw.githubusercontent.com/projectcalico/calico/v3.25.0/manifests/calico.yaml -O
[root@master ~]# vim busybox.yaml
[root@master ~]# kubectl apply -f busybox.yaml
pod/busybox created
[root@master ~]# kubectl get pods
NAME      READY   STATUS    RESTARTS   AGE
busybox   3/3     Running   0          14s
nginx     1/1     Running   0          5m40s
[root@master ~]# kubectl get pods -o wide
NAME      READY   STATUS    RESTARTS   AGE    IP               NODE     NOMINATED NODE   READINESS GATES
busybox   3/3     Running   0          42s    192.168.171.69   worker   <none>           <none>
nginx     1/1     Running   0          6m8s   192.168.171.68   worker   <none>           <none>
[root@master ~]# kubectl exec -it busybox -- wget -o- 192.168.171.68
Defaulted container "busybox1" out of: busybox1, busybox2, busybox3
Connecting to 192.168.171.68 (192.168.171.68:80)
saving to 'index.html'
index.html           100% |********************************************************************************************************|   615  0:00:00 ETA
'index.html' saved
[root@master ~]# kubectl exec -it busybox -- bin/sh
Defaulted container "busybox1" out of: busybox1, busybox2, busybox3
/ #
/ # cat index.html
<!DOCTYPE html>
<html>
<head>
<title>Welcome to nginx!</title>
<style>
html { color-scheme: light dark; }
```

```
  26  vim busybox.yaml
  27  kubectl apply -f busybox.yaml
  28  kubectl get pods
  29  kubectl get pods -o wide
  30  kubectl exec -it busybox -- wget -o- 192.168.171.68
  31  kubectl exec -it busybox -- bin/sh
  32  history
```

Create 5 nginx pods in which two of them is labeled env=prod

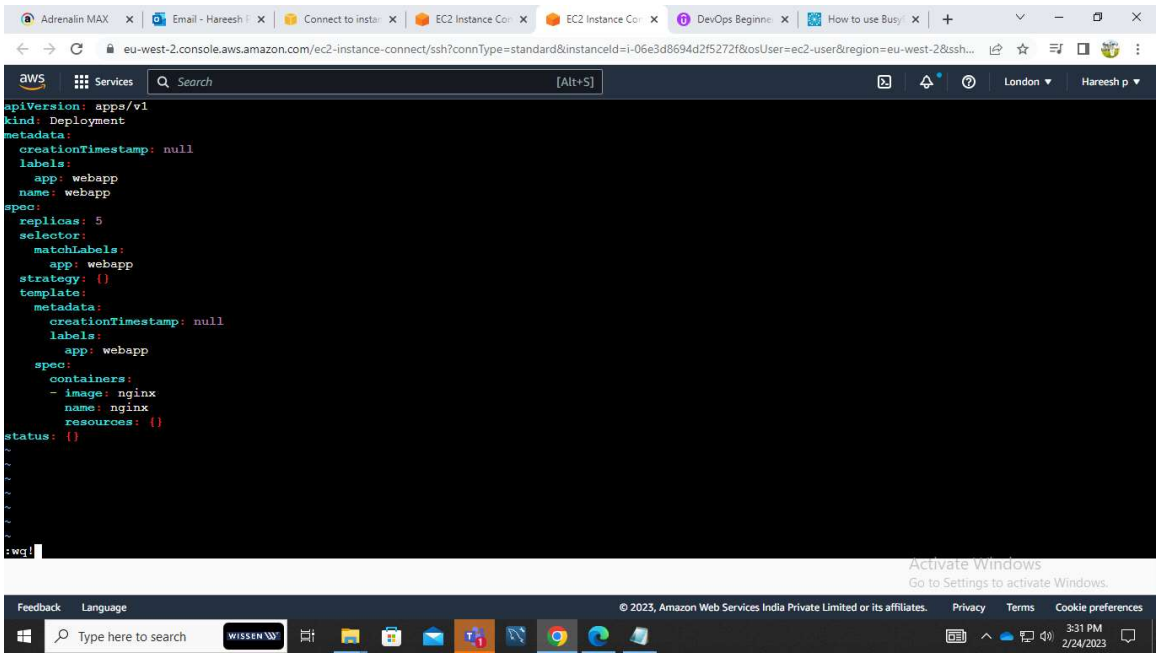
and three of them is labeled env=dev:

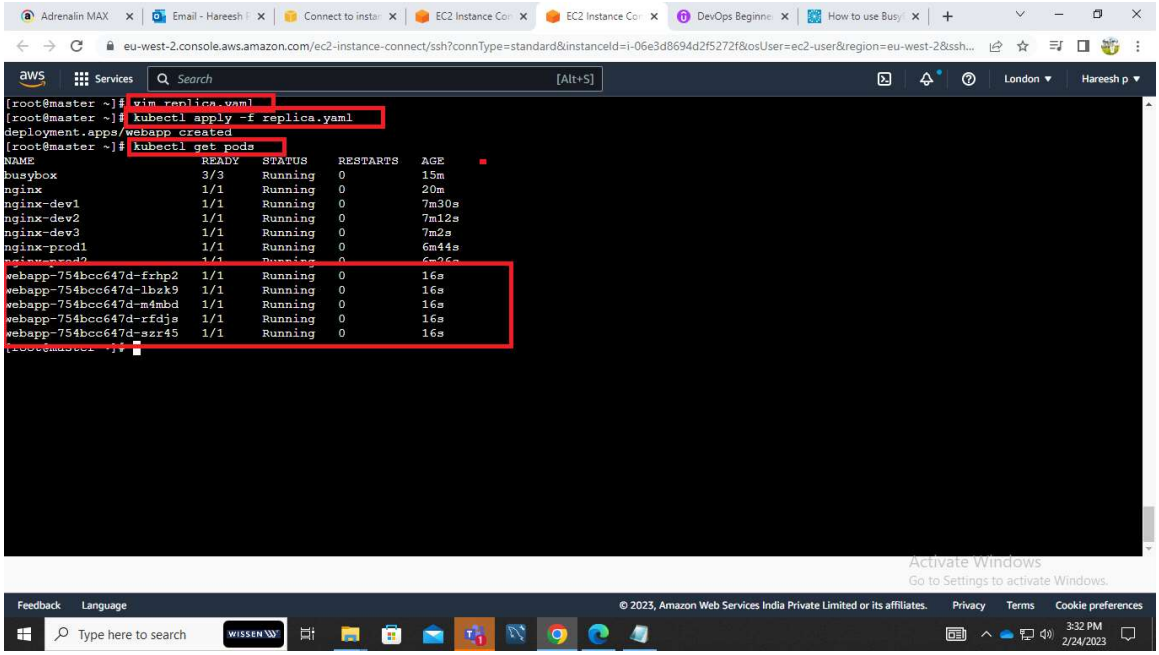



```
33  kubectl run nginx-dev1 --image=nginx --restart=Never --labels=env=dev
34  kubectl run nginx-dev2 --image=nginx --restart=Never --labels=env=dev
35  kubectl run nginx-dev3 --image=nginx --restart=Never --labels=env=dev
36  kubectl run nginx-prod1 --image=nginx --restart=Never --labels=env=prod
37  kubectl run nginx-prod2 --image=nginx --restart=Never --labels=env=prod
38  kubectl get pods --show--labels
39  kubeclt get pods --show-labels
40  kubectl get pods --show-labels
41  history
```

Create a deployment called webapp with image nginx with 5

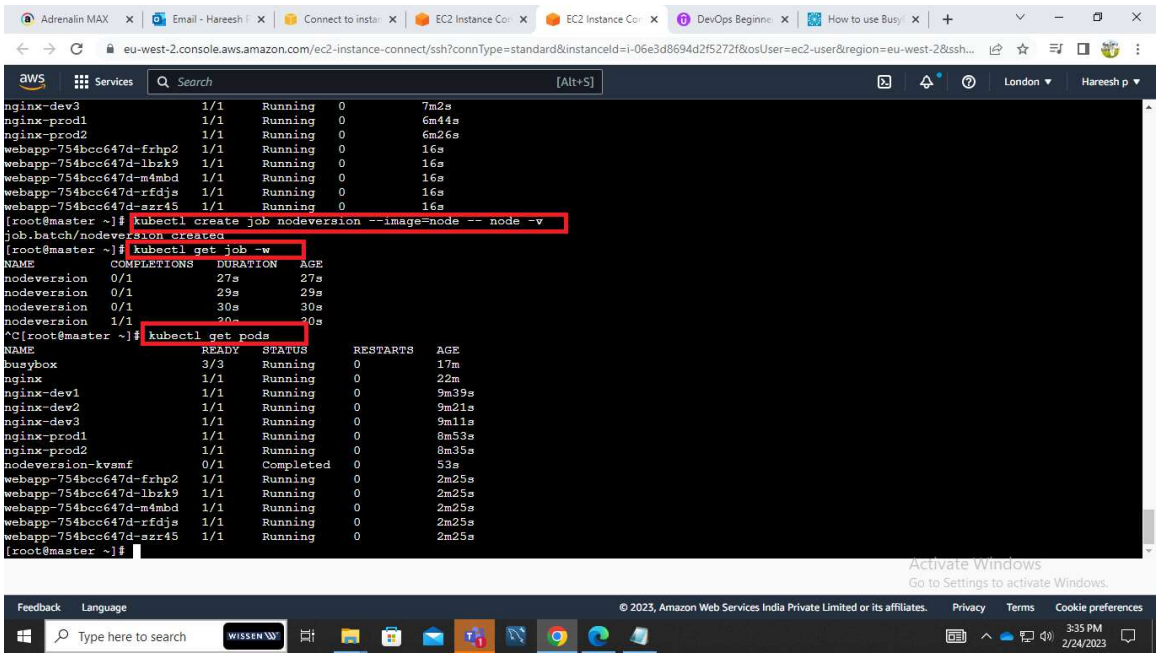
replicas:





Create a Job with an image node which prints node version and

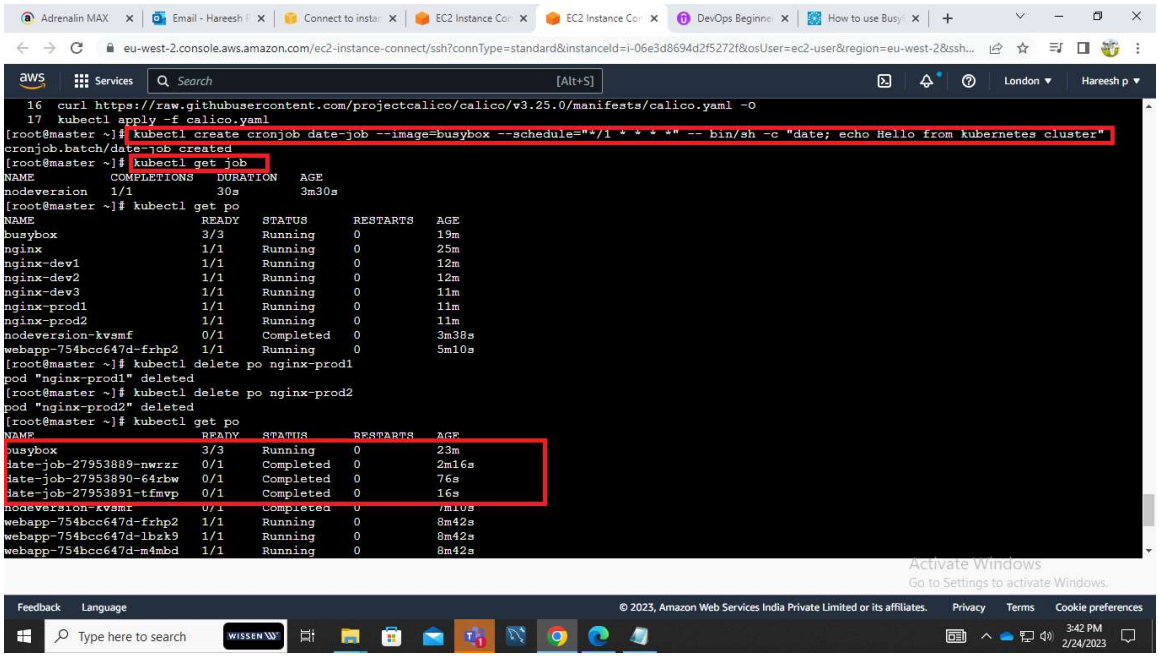
also verifies there is a pod created for this job:




```
45  kubectl create job nodeversion --image=node -- node -v
46  kubectl get job -w
47  kubectl get pods
```

Create a Cronjob with busybox image that prints date and hello

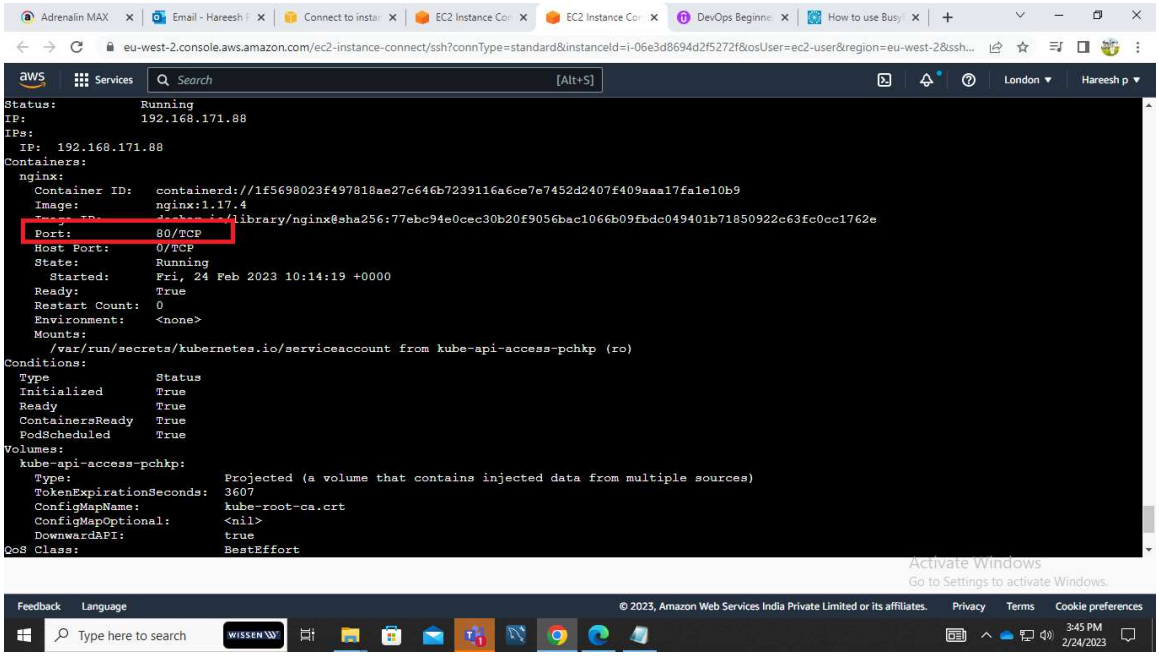
from kubernetes cluster message for every minute:



```
  50  kubectl get job
  51  kubectl get po
  52  kubectl logs date-job-27953888-cbp6f
  53  kubectl delete po nginx
  54  kubectl delete po nginx-dev1
  55  kubectl delete po nginx-dev2
  56  kubectl delete po nginx-dev3
  57  kubectl delete po nginx-prod1
  58  kubectl delete po nginx-prod2
  59  kubectl get po
```

Create the nginx pod with version 1.17.4 and expose it on port

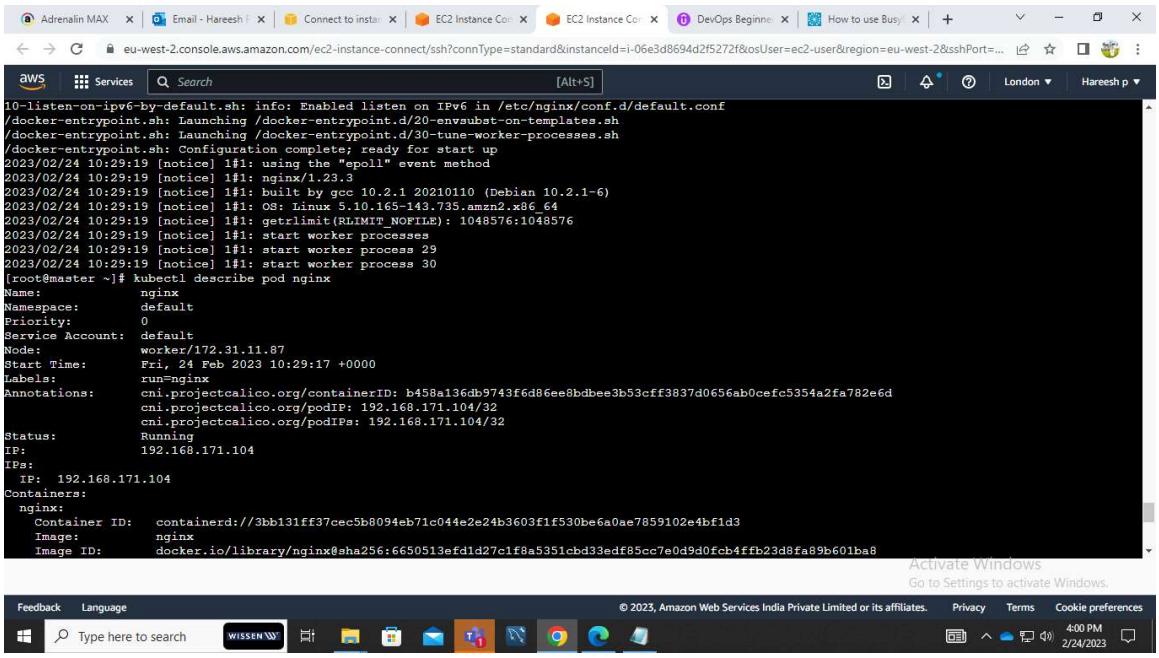
80:




```
  61  kubectl run nginx --image=nginx:1.17.4 --restart=Never --port=80
  62  kubectl get pods
  63  kubectl describe po nginx
```

Create an nginx pod in a default namespace and verify the pod

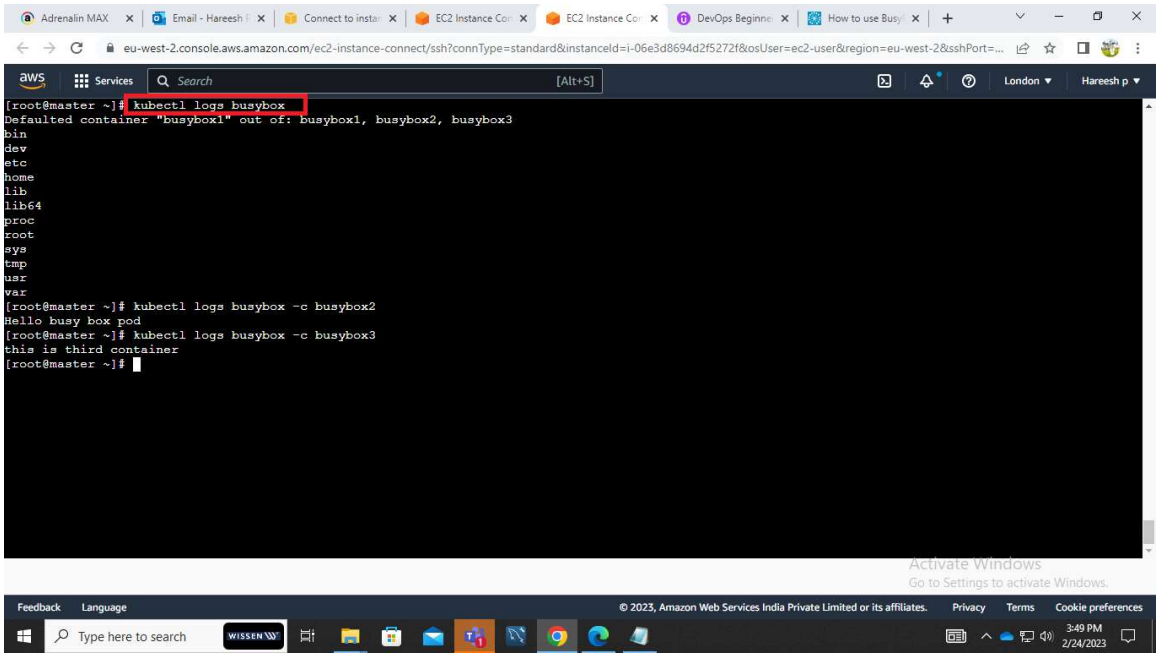
running:




```
88  kubectl run nginx --image=nginx --restart=Never
89  kubectl get pods
90  kubectl logs nginx
91  kubectl describe pod nginx
```

Create a busybox pod and run command ls while creating it and

check the logs:



```
 65  kubectl logs busybox
 66  kubectl logs busybox -c busybox2
 67  kubectl logs busybox -c busybox3
```

If pod crashed, how to check the previous logs of the pod":