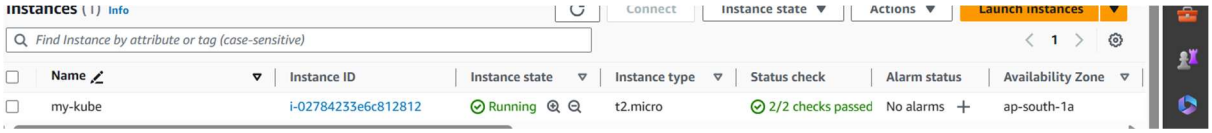
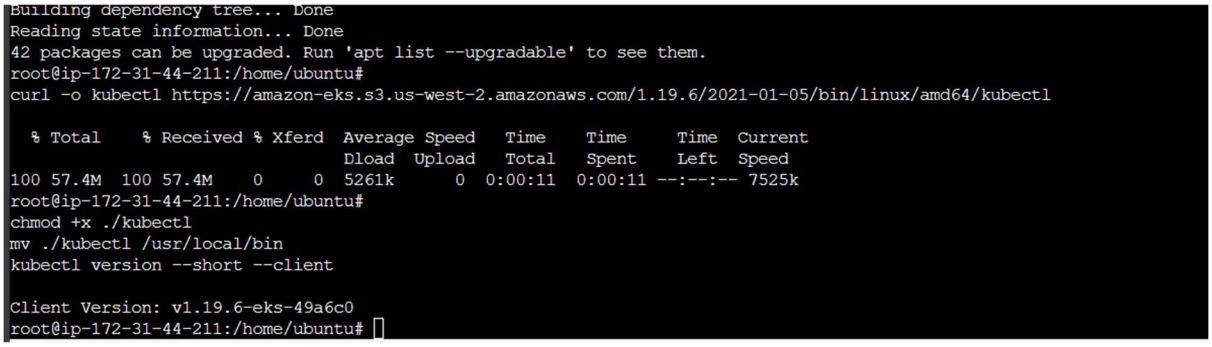
Create the K8s EKS,further you have to do the deployment of Nginx application

Solution

Frist launch the instance in aws

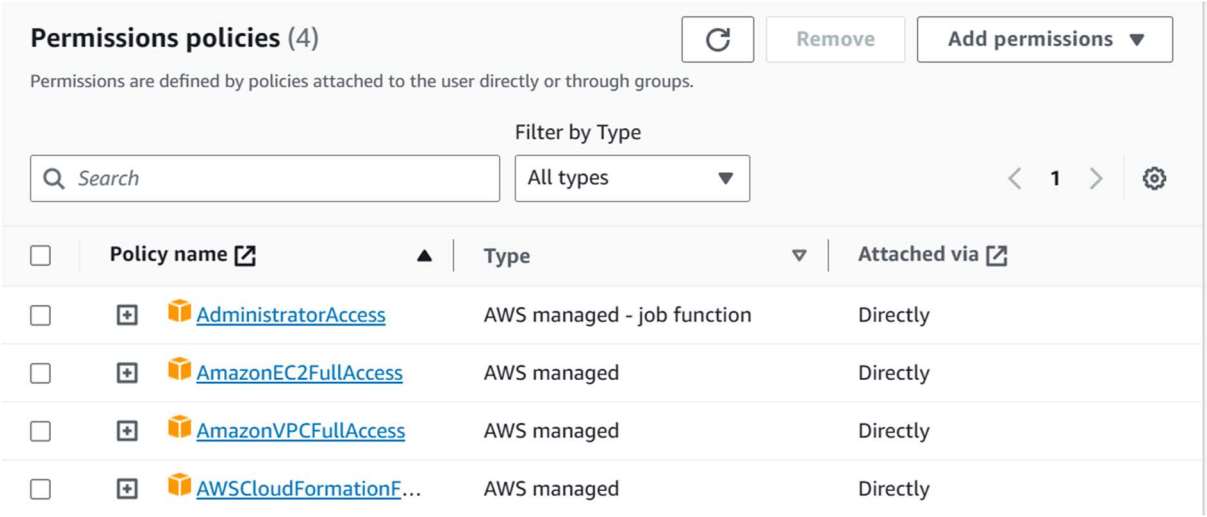


a. Download kubectl version 1.20
b. Grant execution permissions to kubectl executable
c. Move kubectl onto /usr/local/bin
d. Test that your kubectl installation was successful



Setup eksctl in instance

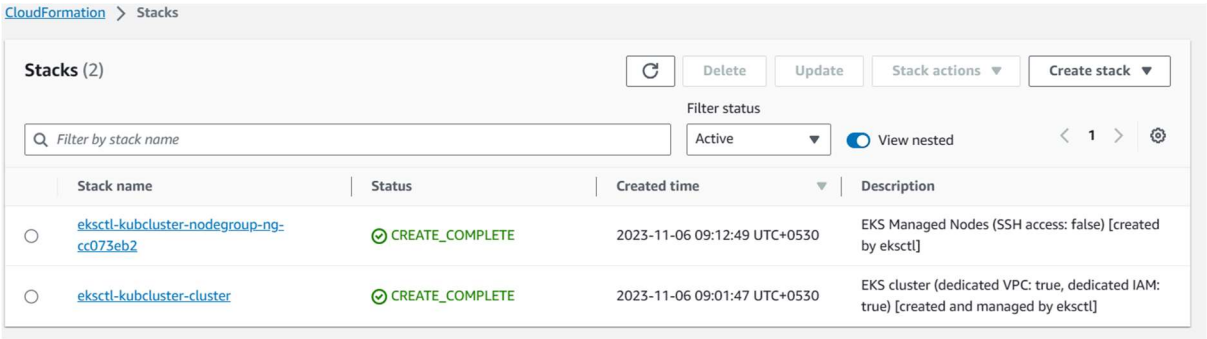
Create iam user with ec2full access ,vpcfullaccess,cloudformationfullaccess



Go to instance and install awscli and configure awsconfigure

```
No VM guests are running outdated hypervisor (qemu) binaries on this host.
root@ip-172-31-44-211:/home/ubuntu# aws configure
AWS Access Key ID [None]: AKIAZDKQXHNBZ7WTXEHM
AWS Secret Access Key [None]: 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
Default region name [None]: ap-south-1
Default output format [None]: json
root@ip-172-31-44-211:/home/ubuntu#
```

Create a ekscluste : eksctl create cluster --name kubcluster --region ap-south-1 --node-type t2.micro




```
root@ip-172-31-44-211:/home/ubuntu# kubectl get nodes
NAME                                             STATUS   ROLES    AGE     VERSION
ip-192-168-12-161.ap-south-1.compute.internal    Ready    <none>   2m36s   v1.27.6-eks-a5df82a
ip-192-168-53-132.ap-south-1.compute.internal    Ready    <none>   2m35s   v1.27.6-eks-a5df82a
root@ip-172-31-44-211:/home/ubuntu#
```

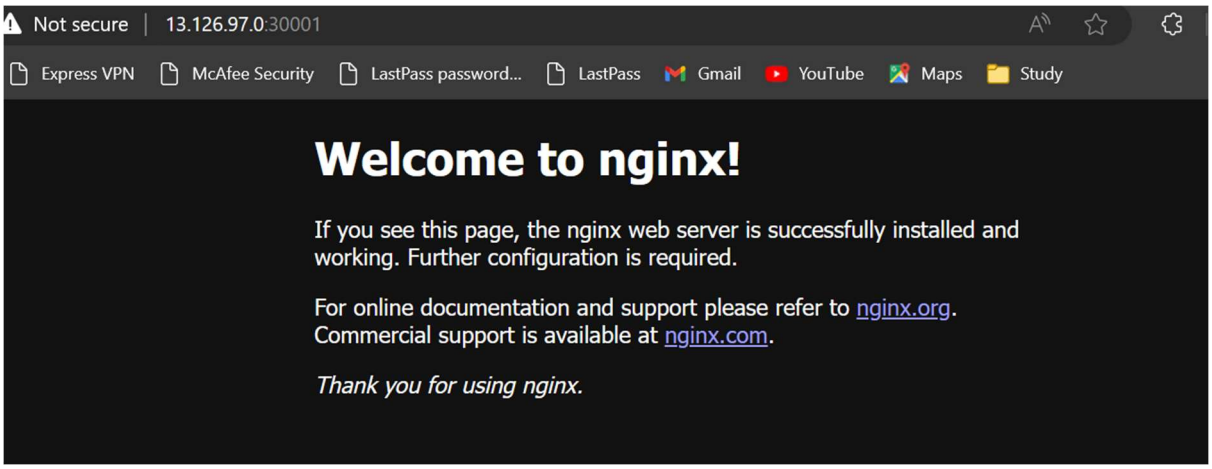
Deployment of nginx

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

```yaml
  name: nginxdeployment
spec:
  replicas: 2
  selector:
    matchLabels:
      prasanthi: lakshmi
  template:
    metadata:
      labels:
        prasanthi: lakshmi
    spec:
      containers:
        - name: nginx-container
          image: nginx
          ports:
            - containerPort: 80
---
apiVersion: v1
kind: Service
metadata:
  name: nginx-deployment-service
spec:
   type: NodePort
   selector:
     prasanthi: lakshmi
   ports:
     - port: 8080
       taregetPort: 80
       nodePort: 30001
```

```
root@ip-172-31-44-211:/home/ubuntu# kubectl apply -f nginx.yaml
deployment.apps/nginxdeployment unchanged
service/nginx-deployment-service unchanged
root@ip-172-31-44-211:/home/ubuntu#
```

```
root@ip-172-31-44-211:/home/ubuntu# kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
nginxdeployment-6fb7d56848-772t2    1/1     Running   0          13m
nginxdeployment-6fb7d56848-w6hb2    1/1     Running   0          46m
root@ip-172-31-44-211:/home/ubuntu# kubectl get svc
NAME                       TYPE        CLUSTER-IP       EXTERNAL-IP   PORT(S)          AGE
kubernetes                 ClusterIP   10.100.0.1       <none>        443/TCP          6h23m
nginx-deployment-service   NodePort    10.100.238.130   <none>        80:30001/TCP     19m
root@ip-172-31-44-211:/home/ubuntu# kubectl get deployment
NAME              READY   UP-TO-DATE   AVAILABLE   AGE
nginxdeployment   2/2     2            2           47m
root@ip-172-31-44-211:/home/ubuntu#
```



complete