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

1. **Prerequisites:**

**Kubectl - A CLI tool for working with K8S clusters.**

**Eksctl - A CLI tool to create a k8s cluster.**

1. **We need an IAM user and attach policy (VPC,EC2,Cloudformation, IAM)- go to the user and create access key and secret access key and download csv.file.**
2. **Create a Linux instance - connect it -**

**First check the version - - version**

**Update the version 1 to 2 from official documentation**

**Unzip ( unzip awscliv2.zip )**

**aws configure**

**Now give the access key,secret access key,region and format(json)**

1. **After configuring credentials for IAM users download k8s. Copy the command from official documentation.**
2. **Give executable permission (Chmod +x ./kubectl )**
3. **Copy the binary to a directory in our path (from eks)**
4. **Check whether k8s is installed ? kubectl version --short - - client**
5. **Next download EKSCTL- ( copy from document )**
6. **Command to create eksctl**

**{ Eksctl create cluster --name developer - - region us-east-2 - -nodegroup-name standard-workers - -node-type t2.micro - -node 3 - -nodes-min 1 - -nodes-max 4 --managed }**

1. **To see the cluster - ( eksctl get cluster )**
2. **Now we have to enable it to connect to our cluster**

**( aws eks update- kubeconfig - -name developer - -region us-east-2 )**

1. **Now we are going to deploy nginx on our EKS cluster**
2. **sudo yum install -y git**
3. **git clone “https link from github”**
4. **Now if we give ls - we can see ( eks-basis , kubectl ,awscliv2.zip bin files )**
5. **Cat nginx-deployment.yaml**
6. **Cat nginx-svc.yaml**
7. **Now we have to apply for service file**

**Kubectl apply -f ./nginx-svc.yaml**

1. **Checking status**

**Kubectl get services**

1. **Next, we have to apply for deployment file**

**Kubectl apply -f ./nginx-deployment.yaml**

1. **Checking status 👍**

**Kubectl get deployment**

1. **To view the pod and node 👍**

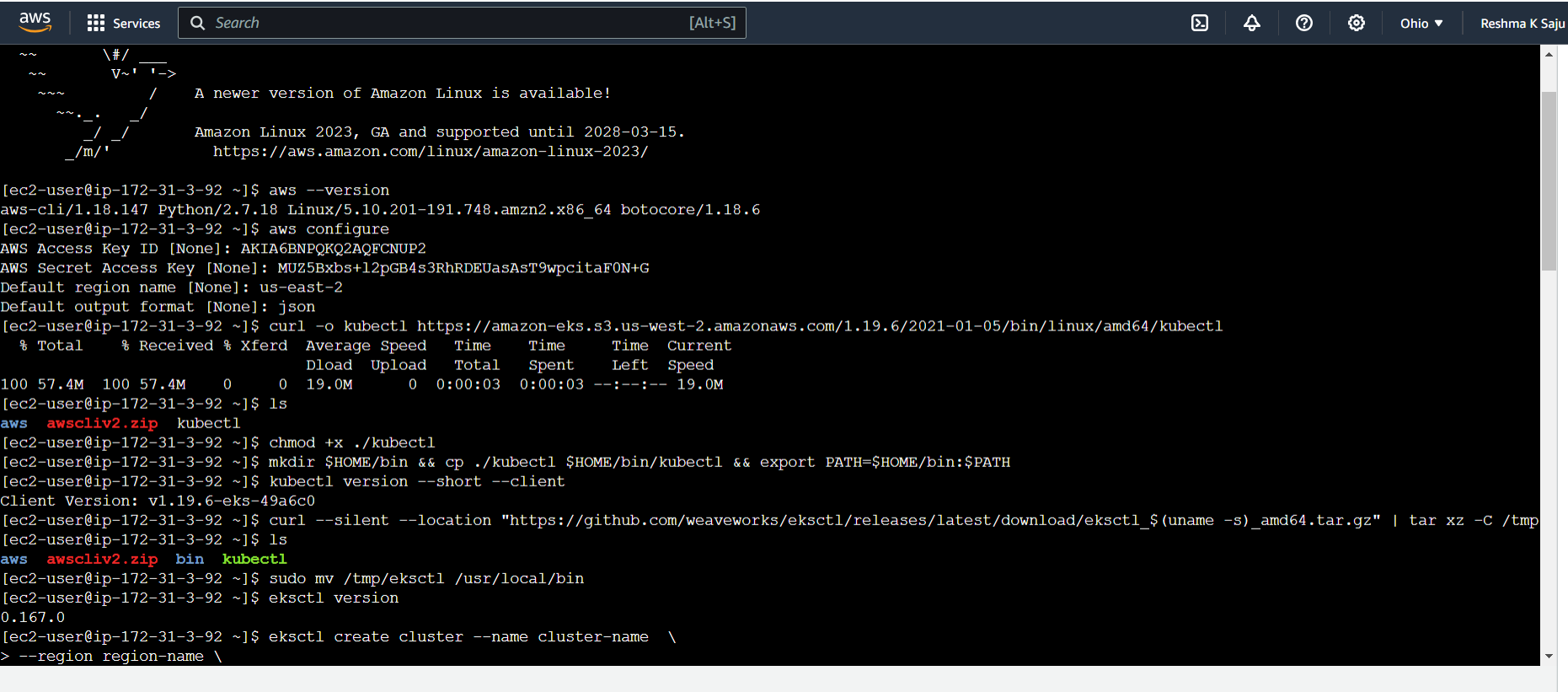
**Kubectl get pod**

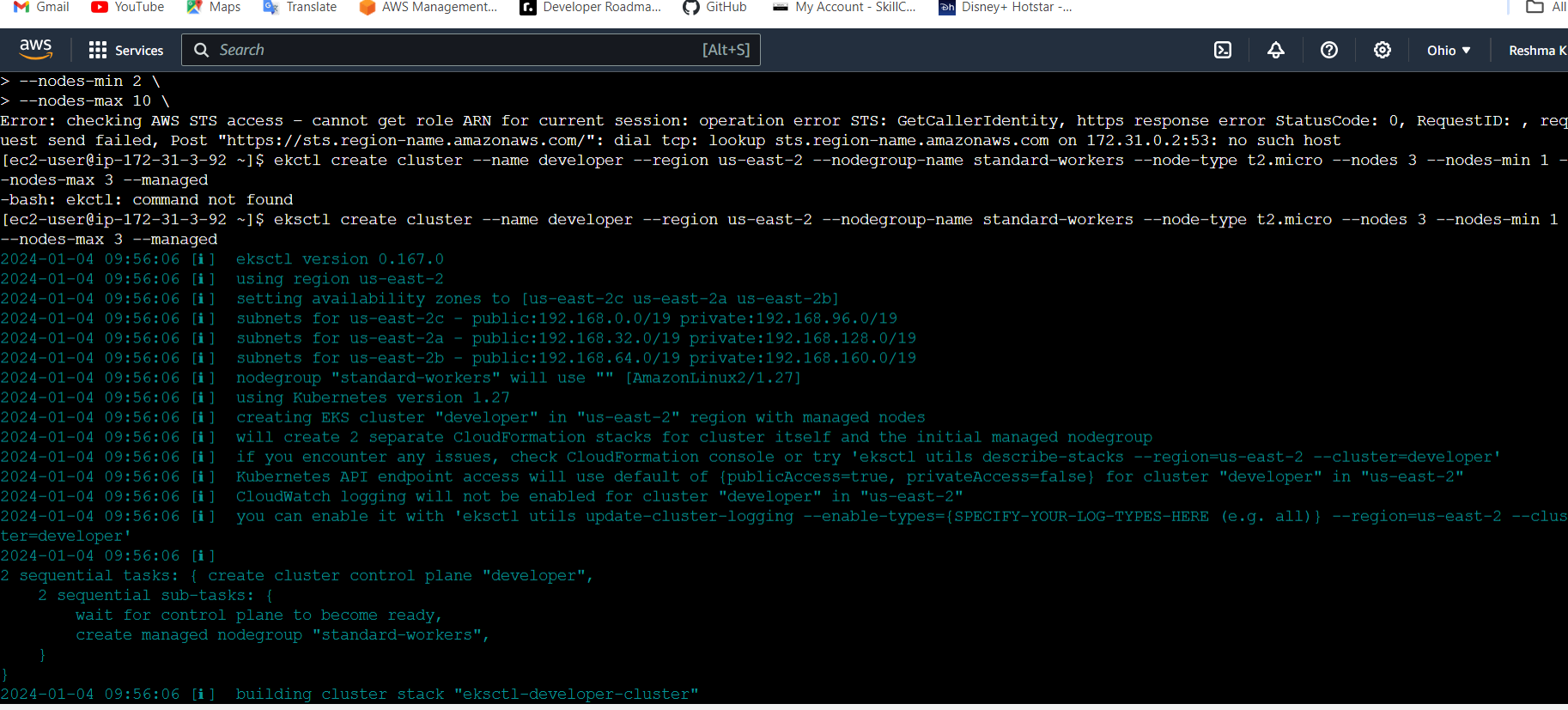
**Kubectl get node**

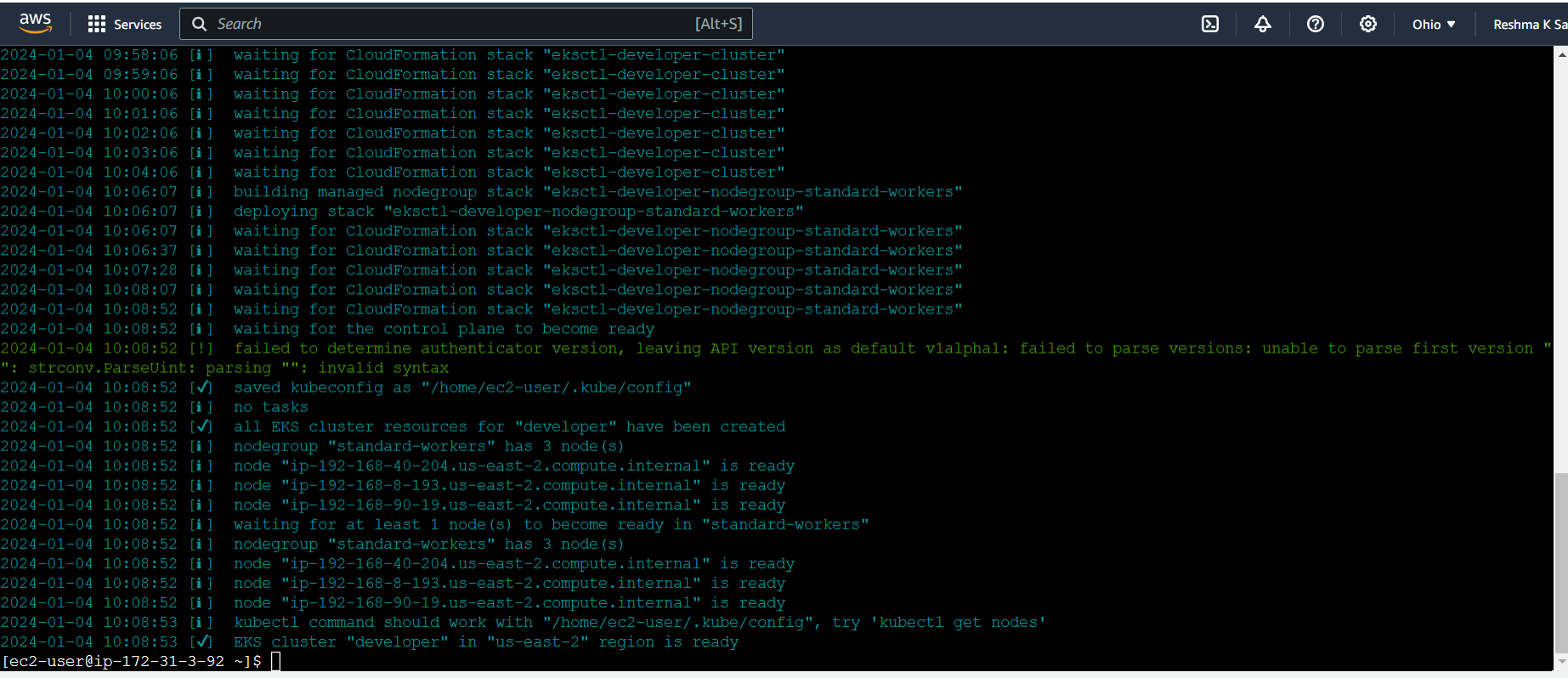
1. **Copy the DNS name from the load balancer and paste in the tab,we can see nginx application.**
2. **To view in system ( curl DNS id )**
3. **After completing everything we have to delete it**

**eksctl delete cluster developer**

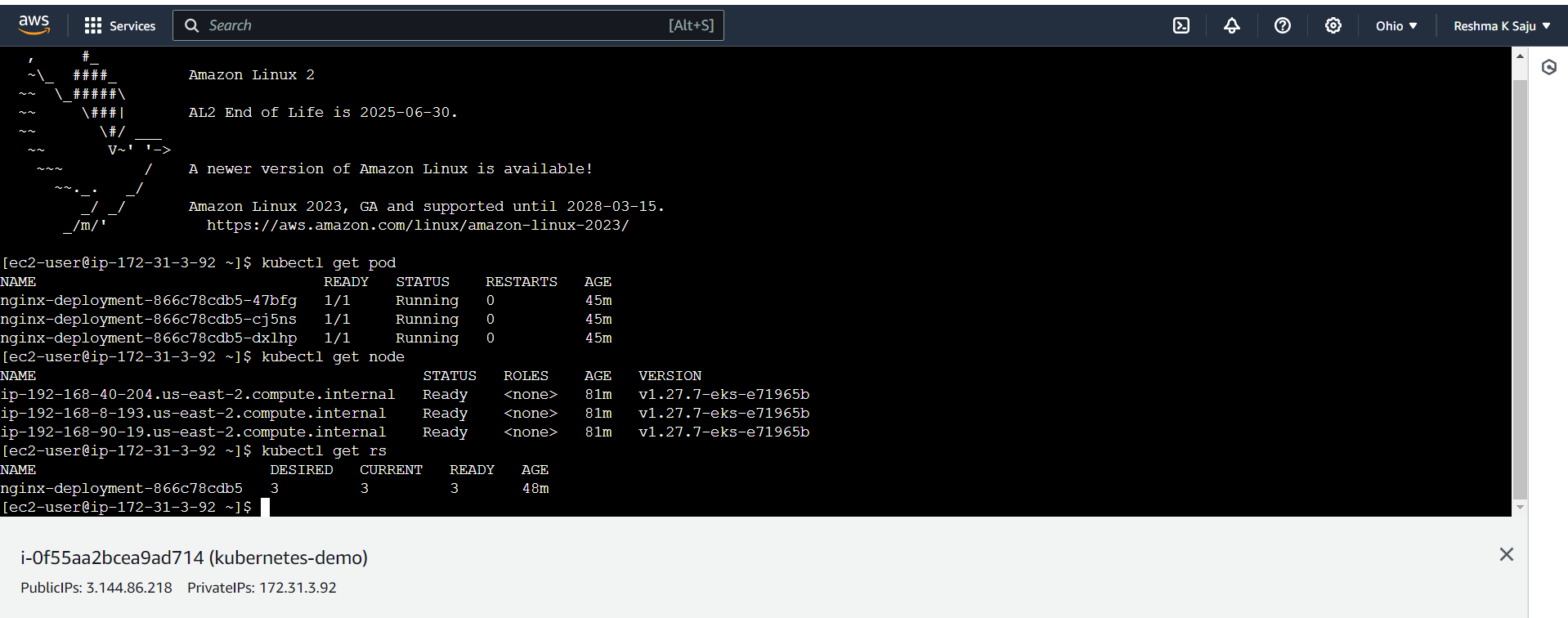
***Screenshots***

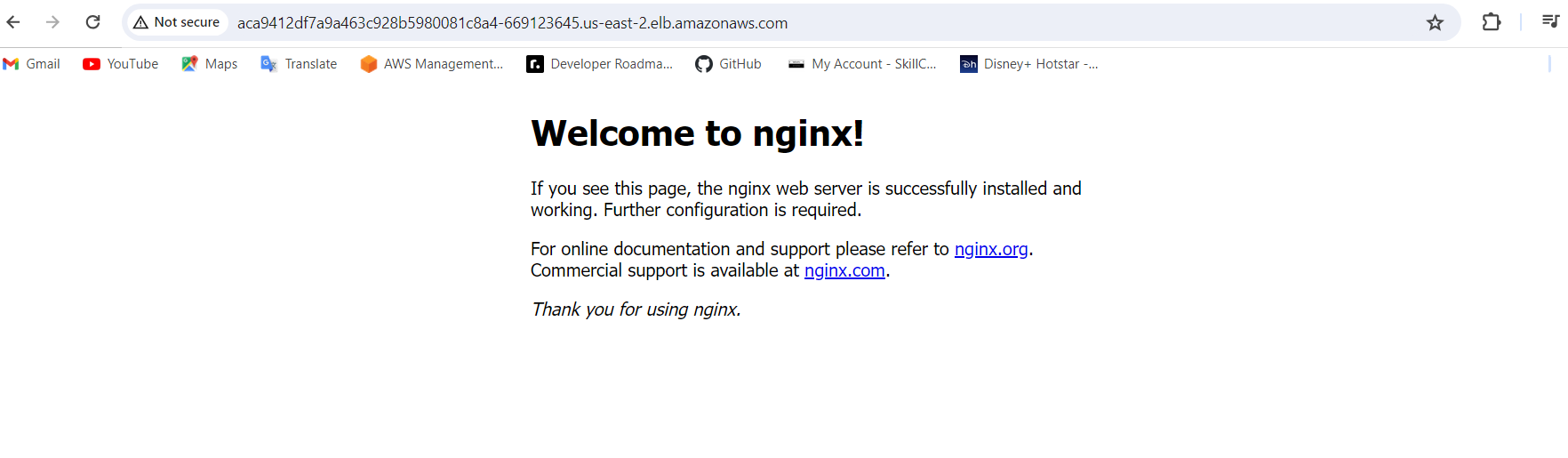
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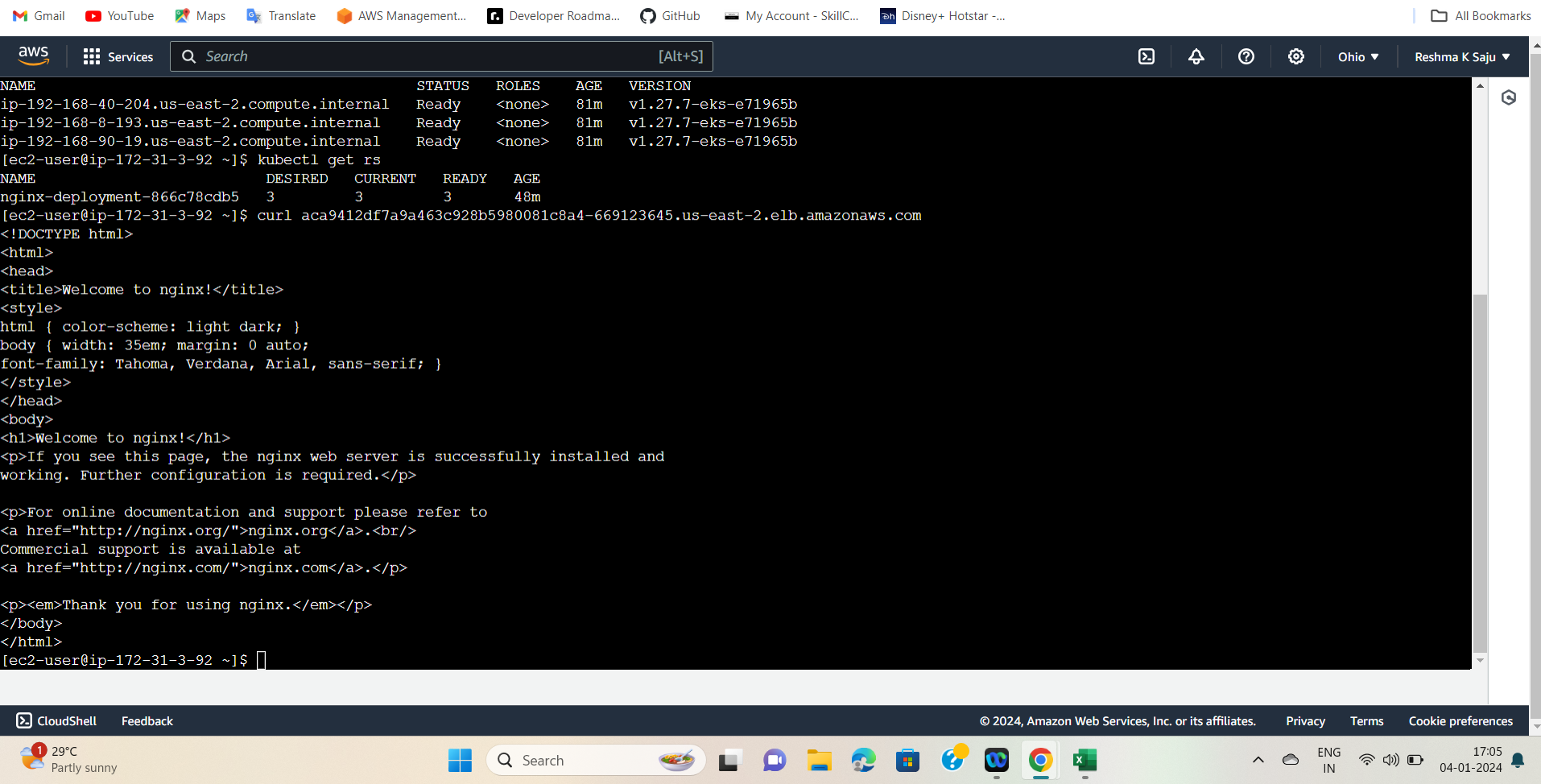
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