## Task 1

Deployment.yaml:

Text

Description automatically generated

Text

Description automatically generated

Ingress.yaml:

Text

Description automatically generated

## Task 2

Create cluster using the command ***eksctl create cluster --name cluster001***:Graphical user interface, text

Description automatically generated  
Graphical user interface, text

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

Add OpenID Connect to cluster using ***eksctl utils associate-iam-oidc-provider --cluster cluster001 --approve***:



View if OpenID connect is connected to your cluster using ***aws iam list-open-id-connect-providers***:

Text

Description automatically generated

* Take note of the AWS ID number: 108026381256

## Task 3

Download the Role Base Access Control (rbac-role.yaml) using ***curl -o rbac-role.yaml curl -o rbac-role.yaml https://raw.githubusercontent.com/RobinNagpal/kubernetes-tutorials/master/06\_tools/007\_alb\_ingress/01\_eks/rbac-role.yaml***:

Text

Description automatically generated

Apply the file using ***kubectl apply -f rbac-role.yaml***:

Text

Description automatically generated

Download the IAM policy using ***curl -o iam\_policy.json https://raw.githubusercontent.com/kubernetes-sigs/aws-load-balancer-controller/v2.3.0/docs/install/iam\_policy.json***:

Text

Description automatically generated

Create the AWS policy using ***aws iam create-policy \***

***--policy-name AWSLoadBalancerControllerIAMPolicy \***

***--policy-document file://iam\_policy.json***:

Text

Description automatically generated

Create the service account using ***eksctl create iamserviceaccount \***

***--cluster=cluster001 \***

***--namespace=kube-system \***

***--name=aws-load-balancer-controller \***

***--attach-policy-arn=arn:aws:iam::108026381256:policy/AWSLoadBalancerControllerIAMPolicy \***

***--override-existing-serviceaccounts \***

***--approve***:

Text

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

Create certificate manager for the ingress controller using ***kubectl apply \***

***--validate=false \***

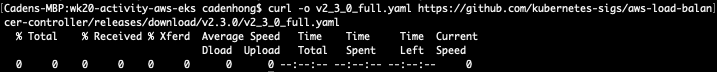
***-f https://github.com/jetstack/cert-manager/releases/download/v1.5.4/cert-manager.yaml***:

Text

Description automatically generated

## Task 4

Make the load balancer controller using ***curl -o v2\_3\_0\_full.yaml https://github.com/kubernetes-sigs/aws-load-balancer-controller/releases/download/v2.3.0/v2\_3\_0\_full.yaml***:



Nano into it and replace ***cluster-name=your-cluster-name*** to ***cluster\_name=cluster001***:

Text

Description automatically generated

Run ***kubectl apply -f v2\_3\_0\_full.yaml***:

Graphical user interface, text

Description automatically generated

View controller using ***kubectl get deployment -n kube-system aws-load-balancer-controller***:



## Task 5

Run ***kubectl apply -f deployment.yaml***:



Run ***kubectl apply -f ingress.yaml***:



Once finished, delete cluster:

Text

Description automatically generated