**Kubernetes Task-2**

Create the K8s EKS,further you have to do the deployment of the Nginx application and access the application outside the cluster.

**Install before AWS CLI** – For interacting with AWS resources , **Kubectl** – Kubernetes CLI tool, **eksctl** – For creating the EKS cluster Create an EKS Cluster eksctl create cluster --name my-cluster --region us-east-1 --nodegroup-name my-nodes --node-type t3.medium --nodes 2 This creates:

* A managed EKS cluster (my-cluster) in us-east-1
* A node group (my-nodes) with 2 t3.medium instances

Check if the cluster is running Create a deployment file nginx-deployment.yaml

apiVersion: apps/v1

kind: Deployment

metadata:

name: nginx-deployment

spec:

replicas: 2

selector:

matchLabels:

app: nginx

template:

metadata:

labels:

app: nginx

spec:

containers:

- name: nginx

image: nginx:latest

ports:

- containerPort: 80

Apply the deploymentCheck if the pods are running Expose Nginx Externally To make Nginx accessible, create a LoadBalancer service Create a nginx-service.yaml file

apiVersion: v1

kind: Service

metadata:

name: nginx-service

spec:

type: LoadBalancer

selector:

app: nginx

ports:

- protocol: TCP

port: 80

targetPort: 80

Apply the service Check the external LoadBalancer IP <http://afebf327a6abf463f927621ab6da68fd-1252971827.us-east-1.elb.amazonaws.com/>



















