Task - host studentapp on tomcat via Kubernetes commands

- Set up IAM roles for EKS.
    - Go to aws IAM service and create a new role for the EKS.
- Create an EKS cluster.
    - Open the Amazon EKS console.
    - Click on “Create Cluster” and choose the “AWS management Console” method.
- Set up IAM roles for EC2.
- Configure the AWS Cloudshell.
    - Open aws cloudshell & configure aws.
- Add worker nodes.
    - In the AWS EKS console select your cluster.
    - In cluster go to compute service.
    - Click on “Ad Node Group”.
    - Select the “Name” & “IAM ROLE”.
    - Click on next.
    - Select the values for the node configuration a below.
    - Click on next.
    - Select the subnets.
    - Click on “next” and then ‘’Create’’
    - Go to the EC2 AWS console & Check whether your node is running or not.
- Verify the cluster.
    - Open cloudshell and execute the following commands.

```
#aws configure

#  aws eks update-kubeconfig --region <region> --name <cluster-name>
```

OR

```
Download minikube on ubuntu
```

OR

```
Use killercoda
```

- Run The Command:
    - `kubectl run tomcat --image=tomcat`
    - `kubectl expose pod tomcat --port=80 --target-port=8080 --type=NodePort`
    - `kubectl cp student.war tomcat:/usr/local/tomcat/webapps/`
- To Check Run The Command:
    - `kubectl get pods` --------> To show which pods has been created.
    - `kubectl get svc` --------> To show which service has been created.
- After Getting Port No Copy Public IP Of Instance And Add Port With It.
    - For E.g: 192.0.0.2.0:32167

OR

IN Case of minikube or kiLLcoda

Kubectl get -o wide nodes ---- > get ip of Pod

The assigned NodePort is random, in my case, it's 30390, which is why you accessed it via podip`:30390/student`

- Your Student.war Application Host Using Kubernetes Successfully.