K8S INSTALLATION STEPS

STEP 1: MASTER NODE INSTALLATION
Create EC2 Instance from **UBUNTU AMI** with type **t2.medium** (2 core CPU and 4GB Ram) and

Github URL: https://github.com/adhig93/k8sinstall [use installk8s-1.23.8.sh]

```
git clone https://github.com/adhig93/k8sinstall.git
cd k8sinstall
sudo sh installk8s-1.23.8.sh
```

STEP 2: Kubernetes node template is now ready create an AMI from this instance to create worker nodes.

To create an AMI from an instance

1. Right-click on the instance you want to use as the basis for your AMI or Click-on Actions button.
2. Action --> Image --> Create Image

Once the Ami is available (usually it takes 2-8 minutes to get ready), create instances with t2.micro to create worker nodes.

STEP 3: Login back to Master instance created in STEP 1

```
Initializing Master Server [Run these commands with root user]

sudo su --> To goto root user
kubeadm init --> To initialize Master server

Note: Copy the command along with token generated and keep it in a separate
file, we need to run this command on worker nodes
```

```
Configuring Kube [Run these commands with ubuntu user]

mkdir -p $HOME/.kube
sudo cp -i /etc/kubernetes/admin.conf $HOME/.kube/config
sudo chown $(id -u):$(id -g) $HOME/.kube/config
```

```
Installing a CNI network on master node [ubuntu user]

sudo sysctl net.bridge.bridge-nf-call-iptables=1
kubectl apply -f "https://cloud.weave.works/k8s/v1.13/net.yaml"
kubectl get nodes
```

STEP 4: CREATE WORKER NODES [ssh to worker nodes created from **STEP 2]**

```
sudo su --> To goto root user
kubeadm join <TOKEN> [Command from STEP 3] --> To connect worker node to Master
```

STEP 5: Login back to Master instance created in STEP 1

```
kubectl get nodes --> To list all the nodes on the cluster
```