**Deploying a Simple Nginx Server on Kubernetes**

* Check the readiness of nodes at the cluster on master node.

kubectl get nodes

* Show the list of existing pods. Since we haven't created any pods, list should be empty.

kubectl get pods

* Get the details of pods.

kubectl get pods -o wide

* Create and run a simple Nginx Server image in a pod on master.

kubectl run nginx-server --image=nginx --port=80

* Get the list of pods on master and check the status and readiness of nginx-server

kubectl get pods -o wide

* Expose the nginx-server pod as a new Kubernetes service on master.

kubectl expose pod nginx-server --port=80 --type=NodePort

* Get the list of services and show the newly created service of nginx-server

kubectl get service -o wide

* You will get an output like this.

kubernetes ClusterIP 10.96.0.1 <none> 443/TCP 13m <none>

nginx-server NodePort 10.110.144.60 <none> 80:32276/TCP 113s run=nginx-server

* Open a browser and check the public ip:<NodePort> of worker node to see Nginx Server is running. In this example, NodePort is 32276.
* Clean the service and pod from the cluster.

kubectl delete service nginx-server

kubectl delete pods nginx-server

* Check there is no pod left.

kubectl get pods