

Master Node Taint Problem:

1. If you create a single node cluster using kubeadm, then it would be master node. Pods do not run on master node and you would get following status:

```
devops@kubernetes1:~$ kubectl get pods
```

NAME	READY	STATUS	RESTARTS
python-application-5bf5458d6f-2zfmd	0/1	Pending	0
python-application-5bf5458d6f-gj8bm	0/1	Pending	0
python-application-5bf5458d6f-j6v9l	0/1	Pending	0

2. When you check the details of the pending pod, you would see at the bottom, the log information.

```
devops@kubernetes1:~$ kubectl describe pod python-application-5bf5458d6f-2zfmd
```

Type	Reason	Age	From
Warning	FailedScheduling	25s (x10 over 8m28s)	default-scheduler

0/1 nodes are available: 1 node(s) had taint {node-role.kubernetes.io/master: }, that the pod didn't tolerate.

3. Check the details of the master node to learn about the taint on the master node.

```
devops@kubernetes1:~$ kubectl describe node kubernetes1
```

Name: kubernetes1

Roles: control-plane,master

CreationTimestamp: Fri, 02 Jul 2021 05:58:56 +0000

Taints: node-role.kubernetes.io/master:NoSchedule

Unschedulable: false

4. Untaint the master node using the following command

```
devops@kubernetes1:~$ kubectl get nodes
```

NAME	STATUS	ROLES	AGE	VERSION
kubernetes1	Ready	control-plane,master	15m	v1.21.2

```
devops@kubernetes1:~$ kubectl taint nodes kubernetes1 node-role.kubernetes.io/master:NoSchedule-
```

node/kubernetes1 untainted

5. Check whether the master node is untainted.

```
devops@kubernetes1:~$ kubectl describe node kubernetes1
Name:          kubernetes1
Roles:         control-plane,master

CreationTimestamp:  Fri, 02 Jul 2021 05:58:56 +0000
Taints:           <none>
Unschedulable:    false
```

6. Now you would see your pods running on Master node.

```
devops@kubernetes1:~$ kubectl get pods
NAME                                READY   STATUS    RESTARTS
AGE
python-application-5bf5458d6f-2zfmd 1/1     Running   0
15m
python-application-5bf5458d6f-gj8bm 1/1     Running   0
15m
python-application-5bf5458d6f-j6v9l 1/1     Running   0
15m
```