

1.

```
root@master:~# kubectl create ns iti-43
namespace/iti-43 created
root@master:~#
```

```
root@master:~# kubectl get ns
NAME                STATUS    AGE
kube-system         Active    3d10h
kube-public         Active    3d10h
kube-node-lease     Active    3d10h
default             Active    3d10h
iti-43              Active    76s
root@master:~#
```

```
★ apiVersion: v1
clusters:
- cluster:
    certificate-authority-data: LS0tLS1CRUdJTiBDRVJUSUZJQ0FURS0tLS0tCr1JSUJlRENDQVIyZ0F3SUJBZ0lCQURB
    S0JnZ3Foa2pPUFFRREFqQWpNU0V3SHdZRFZRUUREQmhyTTNndGMhYVnkKZG1WeUxXTmhrREUzTURVNU9UVTNPRFF3S6hjTk1qUXdN
    VEL6TURjME16QTBXaGN0TXpRd01USXdNRGMwTXpBMAPXakFqTVNFd0h3WURWUWFEREJock0zTXRjMlZ5ZG1WeUxXTmhrREUzTURV
    NU9UVTNPRFF3V1RBVEJnY3Foa2pPCLBRSUJCZ2dxaGtqT1BRTUJCd05DQUFSVkN5NG1rL1VCaEdFM1BIb05lbm9PMGF5SFJIM0V3
    OFdzbWVKSW1MLzUKUitlMlLS3NoMEYzeVozM1BLMlRsZC81ZkwyOHFrSXlsSzh5ZnplcnRDRkpVMEl3UURBT0JnTLZIUTHCQWY4
    RQpCQU1DQXFRd0R3WURWUjBUQVFIL0JBVXdBd0VCL3pBZEJnTLZIUTRFRmdRVUJ2L09ka1B1YUNHTWZPZDg0MlJuCnZiUmJxQUV3
    Q2dZSUt0VWk1aWJFQXQdJRFNRQXdsZ0LoQU9XdzJVUksrTTVXRVPuWEhSVzYyYU84cXF5UHFCEYKN3ZHbmIrNnN2MkVjQWlFQTdT
    d3JlYkZHY3g3U09Dc2JTaEtjYnZJbmdTeHpyK283ODRST1REZUUhKVU09Cci0tLS0tRU5EIEFUFjRkRldQVRFLS0tLS0K
    server: https://127.0.0.1:6443
  name: k3s
contexts:
- context:
    cluster: k3s
    user: default
    namespace: iti-43
  name: default
```

```
root@master:~# kubectl create deployment k3s --image httpd:latest --replicas=2 --namespace iti-43
deployment.apps/k3s created
root@master:~# kubectl get pods
NAME                READY    STATUS    RESTARTS   AGE
k3s-57477fbbdb5-8xvb2 1/1      Running   0           41s
k3s-57477fbbdb5-lcn5r 1/1      Running   0           41s
root@master:~#
```

2.

```
root@master:~# vim kubectl-hostnames
root@master:~# chmod a+x kubectl-hostnames
root@master:~# echo $PATH
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/snap/bin
root@master:~# cp kubectl-hostnames /usr/local/sbin
root@master:~# kubectl hostnames
NAME
master
```

```
root@master:~# cat kubectl-hostnames
#!/bin/bash

kubectl get nodes -o custom-columns=NAME:.metadata.name

root@master:~#
```

3.

```
root@master:~# kubectl create deployment nginx --image=nginx:alpine --replicas=3 --dry-run=client -o
yaml > nginx.yaml
root@master:~# vim nginx.yaml
```

```
root@master:~# cat nginx.yaml
apiVersion: apps/v1
kind: Deployment
metadata:
  creationTimestamp: null
  labels:
    app: nginx
    name: nginx
spec:
  replicas: 3
  selector:
    matchLabels:
      app: nginx
  strategy: {}
  template:
    metadata:
      creationTimestamp: null
      labels:
        app: nginx
    spec:
      containers:
      - image: nginx:alpine
        name: nginx
        env:
        - name: FOO
          value: ITI
```

```
root@master:~# vim nginx.yaml
root@master:~# kubectl apply -f nginx.yaml
deployment.apps/nginx created
```

nginx-8f47944d4-vpl6x	1/1	Running	0	2m40s
nginx-8f47944d4-zcwcq	1/1	Running	0	2m40s
nginx-8f47944d4-pht9z	1/1	Running	0	2m40s

```
root@master:~#
```