

configmap.yml - lab - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER

LAB

configmap.yml

Get Started

configmap.yml

! configmap.yml > kind

io.k8s.api.core.v1.ConfigMap (v1@configmap.json)

1 kind: ConfigMap

2 apiVersion: v1

3 metadata:

4   name: mongodb-cm

5   namespace: default

6 data:

7   DB\_URL: mongo-service

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

root@ahmed-Lenovo-Y520-15IKBN:/home/ahmed/Downloads/Sprints/k8s/day-3/lab# kubectl apply -f configmap.yml

configmap/mongodb-cm created

root@ahmed-Lenovo-Y520-15IKBN:/home/ahmed/Downloads/Sprints/k8s/day-3/lab# kubectl get ConfigMap

NAME DATA AGE

kube-root-ca.crt 1 11d

mongodb-cm 1 25s

root@ahmed-Lenovo-Y520-15IKBN:/home/ahmed/Downloads/Sprints/k8s/day-3/lab#

OUTLINE

TIMELINE

DOCKER CONTAINERS

DOCKER IMAGES

AZURE CONTAINER REGISTRY

DOCKER HUB

SUGGESTED DOCKER HUB IMAGES

Ln 1, Col 16 (9 selected)

Spaces: 2

UTF-8

LF

YAML

Go Live

kubernetes://schema/v1@configmap

Prettier+

Prettier

secret.yml - lab - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER

LAB

configmap.yml

secret.yml

OUTLINE

TIMELINE

DOCKER CONTAINERS

DOCKER IMAGES

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DOCKER HUB

SUGGESTED DOCKER HUB IMAGES

Get Started

! configmap.yml

! secret.yml

! secret.yml

> {} data > USER\_PWD

io.k8s.api.core.v1.Secret (v1@secret.json)

1 apiVersion: v1

2 kind: Secret

3 metadata:

4 name: mongodb-secret

5 namespace: default

6 data:

7 USER\_NAME: bW9uZ291c2Vy

8 USER\_PWD: bW9uZ29wYXNzd29yZA==

root@ahmed-Lenovo-Y520-15IKBN: /home/ahmed/Downloads/Sprints/k8s/day-3/lab

ahmed@ahmed-Lenovo-Y520-15IKBN:~/Downloads/Sprints/k8s/day-3/lab\$ code .

ahmed@ahmed-Lenovo-Y520-15IKBN:~/Downloads/Sprints/k8s/day-3/lab\$ sudo su

[sudo] password for ahmed:

root@ahmed-Lenovo-Y520-15IKBN: /home/ahmed/Downloads/Sprints/k8s/day-3/lab# echo -n 'mongouser' | base64

bW9uZ291c2Vy

root@ahmed-Lenovo-Y520-15IKBN: /home/ahmed/Downloads/Sprints/k8s/day-3/lab# echo -n 'mongopassword' | base64

bW9uZ29wYXNzd29yZA==

root@ahmed-Lenovo-Y520-15IKBN: /home/ahmed/Downloads/Sprints/k8s/day-3/lab#

Ln 8, Col 33

Spaces: 2

UTF-8

LF

YAML

Go Live

kubernetes://schema/v1@secret

Prettier+

Prettier

ActivitiesVisual Studio Code

secret.yml - lab - Visual Studio Code

FileEditSelectionViewGoRunTerminalHelp

EXPLORER

LAB

configmap.ymlsecret.yml

secret.yml > {} data > USER\_PWD

io.k8s.api.core.v1.Secret (v1@secret.json)

1 apiVersion: v1

2 kind: Secret

3 metadata:

4   name: mongodb-secret

5   namespace: default

6 data:

7   USER\_NAME: bw9uZ291c2Vy

8   USER\_PWD: bw9uZ29wYXNzd29yZA==

PROBLEMSOUTPUTDEBUG CONSOLETERMINAL

root@ahmed-Lenovo-Y520-15IKBN:/home/ahmed/Downloads/Sprints/k8s/day-3/lab# kubectl apply -f secret.yml

secret/mongodb-secret created

root@ahmed-Lenovo-Y520-15IKBN:/home/ahmed/Downloads/Sprints/k8s/day-3/lab# kubectl get Secret

NAME          TYPE      DATA   AGE

mongodb-secret  Opaque   2      9s

root@ahmed-Lenovo-Y520-15IKBN:/home/ahmed/Downloads/Sprints/k8s/day-3/lab#

OUTLINE

TIMELINE

DOCKER CONTAINERS

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AZURE CONTAINER REGISTRY

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SUGGESTED DOCKER HUB IMAGES

Ln 8, Col 33Spaces: 2UTF-8LFYAMLGo Livekubernetes://schema/v1@secretPrettier+Prettier



Cip\_service.yml - lab - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER

LAB

Cip\_service.yml

configmap.yml

secret.yml

Get Started

configmap.yml

secret.yml

Cip\_service.yml

! Cip\_service.yml > kind

io.k8s.api.core.v1.Service (v1@service.json)

1 apiVersion: v1

2 kind: Service

3 metadata:

4   name: mongo-service

5   namespace: default

6 spec:

7   selector:

8     app: myapp

9   type: ClusterIP

10

11   ports:

12    - name: myapp

13      protocol: TCP

14      port: 3000

15      targetPort: 3000

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

root@ahmed-Lenovo-Y520-15IKBN:/home/ahmed/Downloads/Sprints/k8s/day-3/lab# kubectl apply -f Cip\_service.yml

service/mongo-service created

root@ahmed-Lenovo-Y520-15IKBN:/home/ahmed/Downloads/Sprints/k8s/day-3/lab# kubectl get Service

NAME          TYPE          CLUSTER-IP     EXTERNAL-IP   PORT(S)     AGE

kubernetes    ClusterIP    10.96.0.1      <none>       443/TCP     21d

mongo-service  ClusterIP    10.109.171.63  <none>       3000/TCP    2m18s

root@ahmed-Lenovo-Y520-15IKBN:/home/ahmed/Downloads/Sprints/k8s/day-3/lab#

OUTLINE

TIMELINE

DOCKER CONTAINERS

DOCKER IMAGES

AZURE CONTAINER REGISTRY

DOCKER HUB

SUGGESTED DOCKER HUB IMAGES

Ln 2, Col 14 (7 selected) Spaces: 2 UTF-8 LF YML Go Live kubernetes://schema/v1@service Prettier+ Prettier

db-deployment.yml - lab - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER

LAB

Cip\_service.yml

configmap.yml

db-deployment.yml

secret.yml

OUTLINE

TIMELINE

DOCKER CONTAINERS

DOCKER IMAGES

AZURE CONTAINER REGISTRY

DOCKER HUB

SUGGESTED DOCKER HUB IMAGES

Get Started

! configmap.yml

! secret.yml

! Cip\_service.yml

! db-deployment.yml

! db-deployment.yml > {} spec > # replicas

2 kind: Deployment

3 metadata:

4   name: db-deployment

5   namespace: default

6   labels:

7     app: myapp

8 spec:

9   selector:

10    matchLabels:

11     app: myapp

12   replicas: 1

13   template:

14     metadata:

15       labels:

16         app: myapp

17     spec:

18       containers:

19         - name: mongo-container

20           image: mongo:5.0

21         resources:

22           envFrom:

23             - secretRef:

24               name: mongodb-secret

25           env:

26             - name: MONGO\_INITDB\_ROOT\_USERNAME

27               value: root

28             - name: MONGO\_INITDB\_ROOT\_PASSWORD

29               value: example

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

root@ahmed-Lenovo-Y520-15IKBN:/home/ahmed/Downloads/Sprints/k8s/day-3/lab# kubectl apply -f db-deployment.yml

deployment.apps/db-deployment created

root@ahmed-Lenovo-Y520-15IKBN:/home/ahmed/Downloads/Sprints/k8s/day-3/lab# kubectl get po

NAME READY STATUS RESTARTS AGE

db-deployment-55b49cf86c-mgbjj 1/1 Running 0 27s

root@ahmed-Lenovo-Y520-15IKBN:/home/ahmed/Downloads/Sprints/k8s/day-3/lab#

Ln 12, Col 14

Spaces: 2

UTF-8

LF

YAML

Go Live

kubernetes://schema/apps/v1@deployment

Prettier+

Prettier

node\_service.yml - lab - Visual Studio Code

FileEditSelectionViewGoRunTerminalHelp

EXPLORER

LAB

- Cip\_service.yml
- configmap.yml
- db-deployment.yml
- node\_service.yml
- secret.yml

node\_service.yml > {} metadata > name

io.k8s.api.core.v1.Service (v1@service.json)

1 apiVersion: v1

2 kind: Service

3 metadata:

4   name: node-service

5   namespace: default

6 spec:

7   selector:

8     app: fromt-app

9     type: NodePort

10   ports:

11    - name: fromt-app

12      protocol: TCP

13      port: 3000

14      targetPort: 3000

15      nodePort: 31000

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

root@ahmed-Lenovo-Y520-15IKBN:/home/ahmed/Downloads/Sprints/k8s/day-3/lab# kubectl apply -f node\_service.yml

service/node-service created

root@ahmed-Lenovo-Y520-15IKBN:/home/ahmed/Downloads/Sprints/k8s/day-3/lab# kubectl get Service

NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
kubernetes	ClusterIP	10.96.0.1	<none>	443/TCP	21d
mongo-service	ClusterIP	10.109.171.63	<none>	3000/TCP	38m
node-service	NodePort	10.108.44.49	<none>	3000:31000/TCP	20s

root@ahmed-Lenovo-Y520-15IKBN:/home/ahmed/Downloads/Sprints/k8s/day-3/lab#

OUTLINE

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DOCKER CONTAINERS

DOCKER IMAGES

AZURE CONTAINER REGISTRY

DOCKER HUB

SUGGESTED DOCKER HUB IMAGES

Ln 4, Col 14Spaces: 2UTF-8LFYAMLGo Livekubernetes://schema/v1@servicePrettier+Prettier



ActivitiesVisual Studio Code

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en96%

app\_deploy.yml - lab - Visual Studio Code

FileEditSelectionViewGoRunTerminalHelp

EXPLORERLABapp\_deploy.ymlCip\_service.ymlconfigmap.ymldb-deployment.ymlnode\_service.ymlsecret.yml

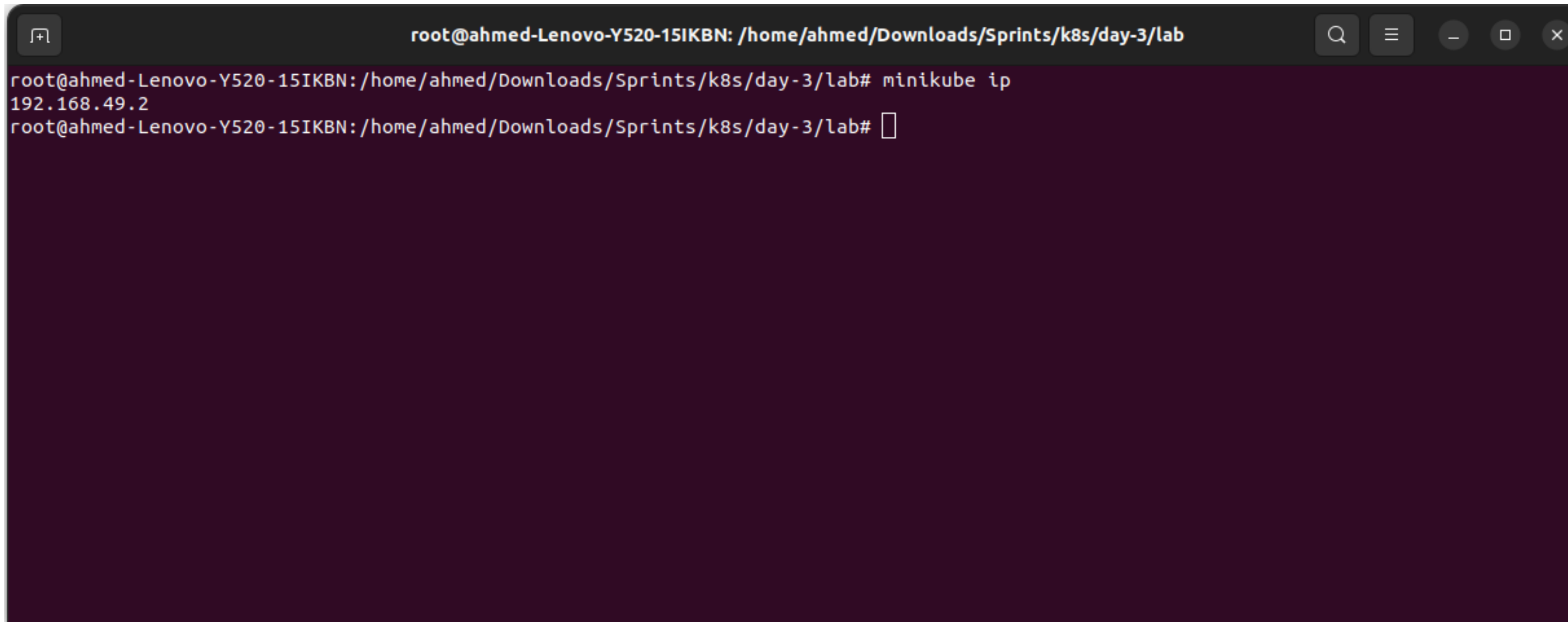
! app\_deploy.yml > {} metadata > nameio.k8s.api.apps.v1.Deployment (v1@deployment.json)1 apiVersion: apps/v12 kind: Deployment3 metadata:4 name: web-app5 namespace: default6 labels:7 app: fromt-app8 spec:9 selector:10 matchLabels:11 app: fromt-app12 replicas: 113 template:14 metadata:15 labels:16 app: fromt-app17 spec:18 containers:19 - name: app-container20 image: nanajanashia/k8s-demo-app:v1.021 resources:22 envFrom:23 - configMapRef:24 name: mongodb-cm25 - secretRef:26 name: mongodb-secret

PROBLEMSOUTPUTDEBUG CONSOLETERMINAL

root@ahmed-Lenovo-Y520-15IKBN:/home/ahmed/Downloads/Sprints/k8s/day-3/lab# kubectl apply -f app\_deploy.ymldeployment.apps/web-app createdroot@ahmed-Lenovo-Y520-15IKBN:/home/ahmed/Downloads/Sprints/k8s/day-3/lab# kubectl get podNAMEREADYSTATUSRESTARTSAGEdb-deployment-55b49cf86c-mgbjj1/1Running016mweb-app-595755c698-fl6hg1/1Running017sroot@ahmed-Lenovo-Y520-15IKBN:/home/ahmed/Downloads/Sprints/k8s/day-3/lab#

OUTLINETIMELINEDOCKER CONTAINERSDOCKER IMAGESAZURE CONTAINER REGISTRYDOCKER HUBSUGGESTED DOCKER HUB IMAGES

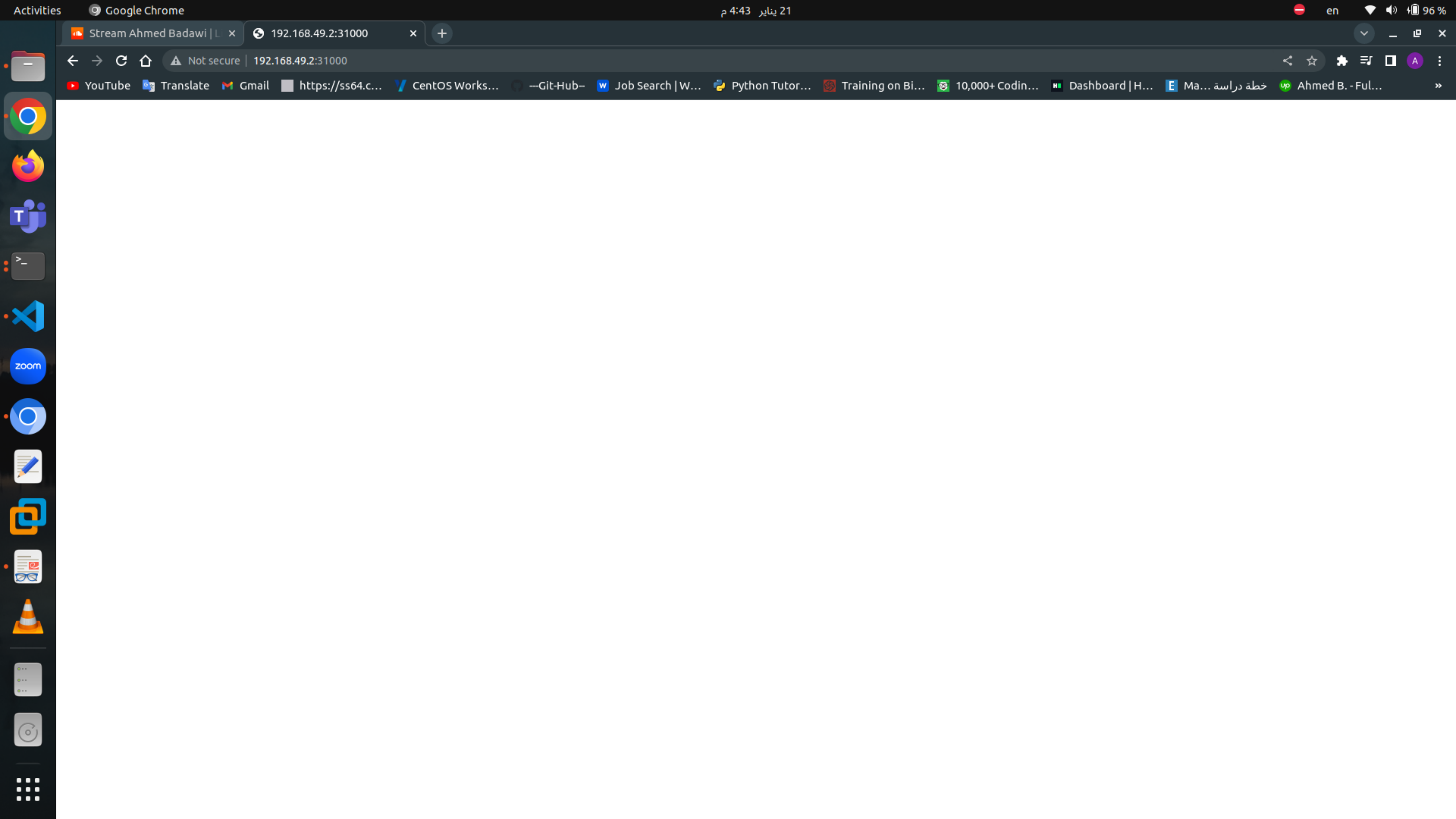
Ln 4, Col 14Spaces: 2UTF-8LFYAMLGo Livekubernetes://schema/apps/v1@deploymentPrettier+Prettier



A terminal window with a dark background and light text. The window title bar is dark gray and contains a search icon, a menu icon, and standard window control buttons (minimize, maximize, close). The terminal text shows a user running the 'minikube ip' command, which returns the IP address '192.168.49.2'. The prompt is 'root@ahmed-Lenovo-Y520-15IKBN: /home/ahmed/Downloads/Sprints/k8s/day-3/lab#'. A vertical scrollbar is visible on the right side of the terminal area.

```
root@ahmed-Lenovo-Y520-15IKBN: /home/ahmed/Downloads/Sprints/k8s/day-3/lab
root@ahmed-Lenovo-Y520-15IKBN: /home/ahmed/Downloads/Sprints/k8s/day-3/lab# minikube ip
192.168.49.2
root@ahmed-Lenovo-Y520-15IKBN: /home/ahmed/Downloads/Sprints/k8s/day-3/lab#
```





AreasAboutAccountCreatorLogout

EditorTab1+60 min

Initialising Kubernetes... done

controlplane \$ kubectl get nodes

NAME	STATUS	ROLES	AGE	VERSION
controlplane	Ready	control-plane	29d	v1.26.0
node01	Ready	<none>	29d	v1.26.0

controlplane \$

195x54

Editor Tab1 +

50 min

controlplane \$ kubectl describe node controlplane

Name: controlplane  
Roles: control-plane  
Labels: beta.kubernetes.io/arch=amd64  
beta.kubernetes.io/os=linux  
kubernetes.io/arch=amd64  
kubernetes.io/hostname=controlplane  
kubernetes.io/os=linux  
node-role.kubernetes.io/control-plane=  
node.kubernetes.io/exclude-from-external-load-balancers=  
Annotations: flannel.alpha.coreos.com/backend-data: {"VNI":1,"VtepMAC":"46:25:c1:ff:8e:a3"}  
flannel.alpha.coreos.com/backend-type: vxlan  
flannel.alpha.coreos.com/kube-subnet-manager: true  
flannel.alpha.coreos.com/public-ip: 172.30.1.2  
kubeadm.alpha.kubernetes.io/cni-socket: unix:///var/run/containerd/containerd.sock  
node.alpha.kubernetes.io/ttl: 0  
projectcalico.org/IPv4Address: 172.30.1.2/24  
projectcalico.org/IPv4IPIPTunnelAddr: 192.168.0.1  
volumes.kubernetes.io/controller-managed-attach-detach: true

CreationTimestamp: Thu, 22 Dec 2022 17:03:18 +0000

Taints: node-role.kubernetes.io/control-plane:NoSchedule

Unschedulable: false

Lease:

HolderIdentity: controlplane

AcquireTime: &lt;unset&gt;

RenewTime: Sat, 21 Jan 2023 15:42:56 +0000

Conditions:

Type	Status	LastHeartbeatTime	LastTransitionTime	Reason	Message
NetworkUnavailable	False	Sat, 21 Jan 2023 15:20:19 +0000	Sat, 21 Jan 2023 15:20:19 +0000	FlannelIsUp	Flannel is running on this node
MemoryPressure	False	Sat, 21 Jan 2023 15:40:44 +0000	Thu, 22 Dec 2022 17:03:10 +0000	KubeletHasSufficientMemory	kubelet has sufficient memory available
DiskPressure	False	Sat, 21 Jan 2023 15:40:44 +0000	Thu, 22 Dec 2022 17:03:10 +0000	KubeletHasNoDiskPressure	kubelet has no disk pressure
PIDPressure	False	Sat, 21 Jan 2023 15:40:44 +0000	Thu, 22 Dec 2022 17:03:10 +0000	KubeletHasSufficientPID	kubelet has sufficient PID available
Ready	True	Sat, 21 Jan 2023 15:40:44 +0000	Thu, 22 Dec 2022 17:03:54 +0000	KubeletReady	kubelet is posting ready status. AppArmor enabled

Addresses:

InternalIP: 172.30.1.2

Hostname: controlplane

Capacity:

cpu: 1  
ephemeral-storage: 20134592Ki  
hugepages-2Mi: 0  
memory: 2030940Ki  
pods: 110

Allocatable:

cpu: 1  
ephemeral-storage: 19586931083  
hugepages-2Mi: 0  
memory: 1928540Ki  
pods: 110

System Info:

Machine ID: 388a2d0f867a4404bc12a0093bd9ed8d  
System UUID: 71c955cc-569f-4ea5-8ee3-0271bb7310f2  
Boot ID: 5f1a435d-c9cb-4cb6-8514-843843fb96b7  
Kernel Version: 5.4.0-131-generic



Editor Tab 1 +

44 min

```
controlplane $ kubectl describe node controlplane
```

```
Name: controlplane
Roles: control-plane
Labels: beta.kubernetes.io/arch=amd64
       beta.kubernetes.io/os=linux
```

```
       color=blue
```

```
       kubernetes.io/arch=amd64
```

```
       kubernetes.io/hostname=controlplane
```

```
       kubernetes.io/os=linux
```

```
       node-role.kubernetes.io/control-plane=
```

```
       node.kubernetes.io/exclude-from-external-load-balancers=
```

```
Annotations: flannel.alpha.coreos.com/backend-data: {"VNI":1,"VtepMAC":"46:25:c1:ff:8e:a3"}
```

```
             flannel.alpha.coreos.com/backend-type: vxlan
```

```
             flannel.alpha.coreos.com/kube-subnet-manager: true
```

```
             flannel.alpha.coreos.com/public-ip: 172.30.1.2
```

```
             kubeadm.alpha.kubernetes.io/cri-socket: unix:///var/run/containerd/containerd.sock
```

```
             node.alpha.kubernetes.io/ttl: 0
```

```
             projectcalico.org/IPv4Address: 172.30.1.2/24
```

```
             projectcalico.org/IPv4IPIPTunnelAddr: 192.168.0.1
```

```
             volumes.kubernetes.io/controller-managed-attach-detach: true
```

```
CreationTimestamp: Thu, 22 Dec 2022 17:03:18 +0000
```

```
Taints: node-role.kubernetes.io/control-plane:NoSchedule
```

```
Unschedulable: false
```

```
Lease:
```

```
  HolderIdentity: controlplane
```

```
  AcquireTime: <unset>
```

```
  RenewTime: Sat, 21 Jan 2023 15:48:03 +0000
```

```
Conditions:
```

Type	Status	LastHeartbeatTime	LastTransitionTime	Reason	Message
NetworkUnavailable	False	Sat, 21 Jan 2023 15:20:19 +0000	Sat, 21 Jan 2023 15:20:19 +0000	FlannelIsUp	Flannel is running on this node
MemoryPressure	False	Sat, 21 Jan 2023 15:45:51 +0000	Thu, 22 Dec 2022 17:03:10 +0000	KubeletHasSufficientMemory	kubelet has sufficient memory available
DiskPressure	False	Sat, 21 Jan 2023 15:45:51 +0000	Thu, 22 Dec 2022 17:03:10 +0000	KubeletHasNoDiskPressure	kubelet has no disk pressure
PIDPressure	False	Sat, 21 Jan 2023 15:45:51 +0000	Thu, 22 Dec 2022 17:03:10 +0000	KubeletHasSufficientPID	kubelet has sufficient PID available
Ready	True	Sat, 21 Jan 2023 15:45:51 +0000	Thu, 22 Dec 2022 17:03:54 +0000	KubeletReady	kubelet is posting ready status. AppArmor enabled

```
Addresses:
```

```
  InternalIP: 172.30.1.2
```

```
  Hostname: controlplane
```

```
Capacity:
```

```
  cpu: 1
```

```
  ephemeral-storage: 20134592Ki
```

```
  hugepages-2Mi: 0
```

```
  memory: 2030940Ki
```

```
  pods: 110
```

```
Allocatable:
```

```
  cpu: 1
```

```
  ephemeral-storage: 19586931083
```

```
controlplane $ kubectl label nodes controlplane color=blue--
```

```
error: invalid label value: "color=blue--": a valid label must be an empty string or consist of alphanumeric characters, '-', '_' or '.', and must start and end with an alphanumeric character (e.g. 'MyValue', or 'my_value', or '12345', regex used for validation is '([A-Za-z0-9][-A-Za-z0-9_.]*)?[A-Za-z0-9]?')
```

```
controlplane $ kubectl label nodes controlplane color=blue --
```

```
node/controlplane not labeled
```

```
controlplane $ kubectl describe node controlplane
```

```
Name: controlplane
```

Editor Tab 1 +

51 min ⌂ °

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: blue
  labels:
    app: myapp
spec:
  selector:
    matchLabels:
      app: myapp
  replicas: 3
  template:
    metadata:
      labels:
        app: myapp
    spec:
      containers:
        - name: nginx-container
          image: nginx
          resources:
            {}
      affinity:
        nodeAffinity:
          requiredDuringSchedulingIgnoredDuringExecution:
            nodeSelectorTerms:
              - matchExpressions:
                  - key: color
                    operator: In
                    values:
                      - blue
      tolerations:
        - key: "node-role.kubernetes.io/control-plane"
          operator: "Exists"
          effect: "NoSchedule"
```

-- INSERT --

33,31

All

Editor Tab 1 + 51 min ⌂ °

```
controlplane $ vim deploy.yml
controlplane $ kubectl apply -f deploy.yml
deployment.apps/blue created
controlplane $ kubectl get po -o wide
NAME                READY   STATUS    RESTARTS   AGE   IP            NODE           NOMINATED NODE   READINESS GATES
blue-6dfc787ddf-gfrb6 1/1     Running   0           9s    192.168.0.7   controlplane   <none>           <none>
blue-6dfc787ddf-qh257 1/1     Running   0           9s    192.168.0.6   controlplane   <none>           <none>
blue-6dfc787ddf-x6ldk 1/1     Running   0           9s    192.168.0.8   controlplane   <none>           <none>
controlplane $
```



Editor Tab1 +

47 min<sup>⌂</sup>

```
controlplane $ kubectl taint node node01 spray=mortein:NoSchedule
node/node01 tainted
```

```
controlplane $ kubectl describe node node01
```

```
Name:          node01
Roles:         <none>
Labels:        beta.kubernetes.io/arch=amd64
               beta.kubernetes.io/os=linux
               kubernetes.io/arch=amd64
               kubernetes.io/hostname=node01
               kubernetes.io/os=linux
Annotations:   flannel.alpha.coreos.com/backend-data: {"VNI":1,"VtepMAC":"a2:ba:84:05:b2:b4"}
               flannel.alpha.coreos.com/backend-type: vxlan
               flannel.alpha.coreos.com/kube-subnet-manager: true
               flannel.alpha.coreos.com/public-ip: 172.30.2.2
               kubeadm.alpha.kubernetes.io/cri-socket: unix:///var/run/containerd/containerd.sock
               node.alpha.kubernetes.io/ttl: 0
               projectcalico.org/IPv4Address: 172.30.2.2/24
               projectcalico.org/IPv4IPIPTunnelAddr: 192.168.1.1
               volumes.kubernetes.io/controller-managed-attach-detach: true
```

```
CreationTimestamp: Thu, 22 Dec 2022 17:33:17 +0000
```

```
Taints:          spray=mortein:NoSchedule
```

```
Unschedulable:   false
```

```
Lease:
```

```
  HolderIdentity: node01
  AcquireTime:    <unset>
  RenewTime:      Sat, 21 Jan 2023 16:24:08 +0000
```

```
Conditions:
```

Type	Status	LastHeartbeatTime	LastTransitionTime	Reason	Message
NetworkUnavailable	False	Sat, 21 Jan 2023 16:02:34 +0000	Sat, 21 Jan 2023 16:02:34 +0000	FlannelIsUp	Flannel is running on this node
MemoryPressure	False	Sat, 21 Jan 2023 16:22:25 +0000	Thu, 22 Dec 2022 17:33:17 +0000	KubeletHasSufficientMemory	kubelet has sufficient memory available
DiskPressure	False	Sat, 21 Jan 2023 16:22:25 +0000	Thu, 22 Dec 2022 17:33:17 +0000	KubeletHasNoDiskPressure	kubelet has no disk pressure
PIDPressure	False	Sat, 21 Jan 2023 16:22:25 +0000	Thu, 22 Dec 2022 17:33:17 +0000	KubeletHasSufficientPID	kubelet has sufficient PID available
Ready	True	Sat, 21 Jan 2023 16:22:25 +0000	Thu, 22 Dec 2022 17:33:45 +0000	KubeletReady	kubelet is posting ready status. AppArmor enabled

```
Addresses:
```

```
  InternalIP: 172.30.2.2
  Hostname:   node01
```

```
Capacity:
```

```
  cpu:          1
  ephemeral-storage: 20134592Ki
  hugepages-2Mi: 0
  memory:       2030940Ki
  pods:         110
```

```
Allocatable:
```

```
  cpu:          1
  ephemeral-storage: 19586931083
  hugepages-2Mi: 0
  memory:       1928540Ki
  pods:         110
```

```
System Info:
```

```
  Machine ID:      388a2d0f867a4404bc12a0093bd9ed8d
  System UUID:     71c955cc-569f-4ea5-8ee3-0271bb7310f2
  Boot ID:         5f1a435d-c9cb-4cb6-8514-843843fb96b7
  Kernel Version:  5.4.0-131-generic
```

Editor Tab 1 +

45 min<sup>±0</sup>

```
apiVersion: v1
kind: Pod
metadata:
  name: "mosquito"
  labels:
    app: "myapp"
spec:
  containers:
    - name: nginx-container
      image: "nginx"
      resources:
```

Editor Tab 1 + 44 min ⌘~°

```
controlplane $ vim pod.yml
controlplane $ kubectl apply -f pod.yml
pod/mosquito created
controlplane $ kubectl get po -o wide
NAME          READY   STATUS    RESTARTS   AGE   IP          NODE          NOMINATED NODE   READINESS GATES
mosquito      0/1     Pending   0           8s    <none>      <none>        <none>           <none>
controlplane $
```



Editor Tab 1 +

40 min<sup>±0</sup>

```
apiVersion: v1
kind: Pod
metadata:
  name: "bee"
  labels:
    app: "myapp"
spec:
  containers:
    - name: nginx-container
      image: "nginx"
      resources:
tolerations:
  - key: "spray"
    operator: "Equal"
    value: "mortein"
    effect: "NoSchedule"
```

EditorTab1+40 min⌘~°

```
controlplane $ vim pod.yml
controlplane $ kubectl apply -f pod.yml
pod/mosquito created
controlplane $ kubectl get po -o wide
NAME          READY   STATUS    RESTARTS   AGE   IP        NODE    NOMINATED NODE   READINESS GATES
mosquito      0/1     Pending   0           8s    <none>    <none>   <none>            <none>
controlplane $ vim bee.yml
controlplane $ kubectl apply -f bee.yml
pod/bee created
controlplane $ kubectl get po -o wide
NAME          READY   STATUS    RESTARTS   AGE   IP        NODE    NOMINATED NODE   READINESS GATES
bee           1/1     Running   0           6s    192.168.1.3  node01   <none>            <none>
mosquito      0/1     Pending   0           4m6s  <none>    <none>   <none>            <none>
controlplane $
```