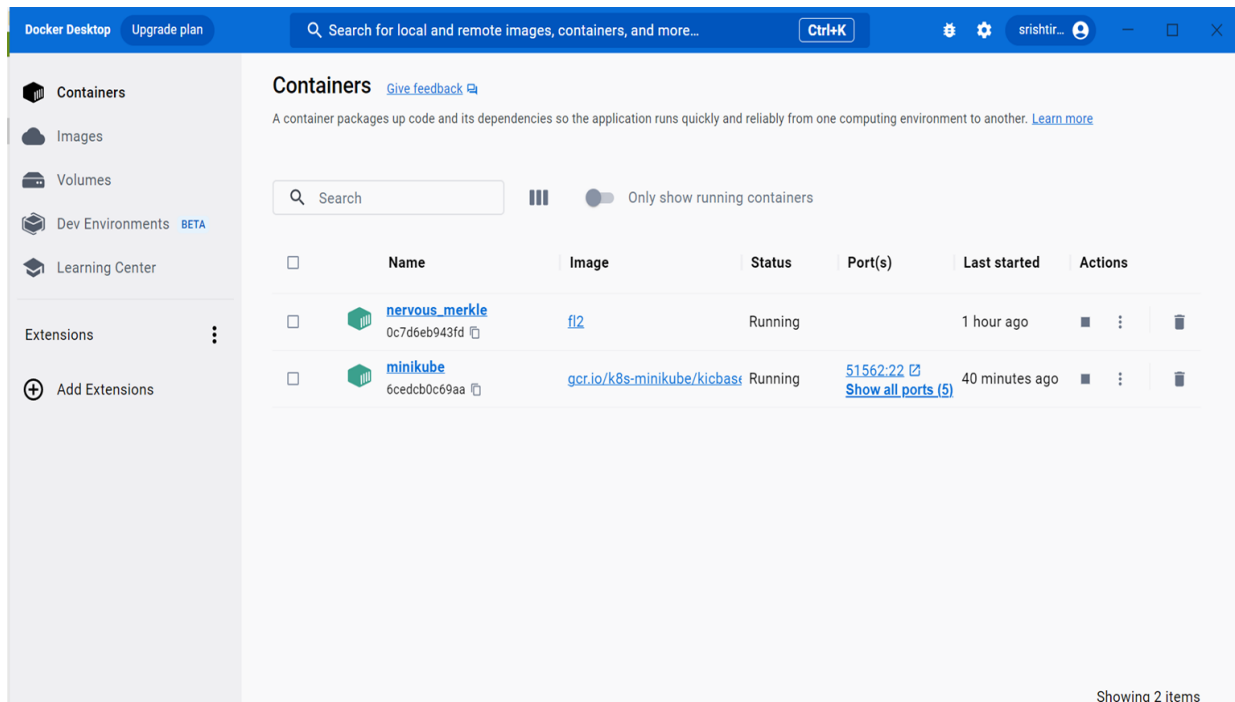


Kubernetes Commands



```
Command Prompt
Microsoft Windows [Version 10.0.19045.2846]
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C:\Users\hp>minikube version
minikube version: v1.30.1
commit: 08896fd1dc362c097c925146c4a0d0dac715ace0

C:\Users\hp>kubect1 config view
apiVersion: v1
clusters:
- cluster:
    certificate-authority: C:\Users\hp\.minikube\ca.crt
    extensions:
    - extension:
        last-update: Wed, 26 Apr 2023 16:32:49 IST
        provider: minikube.sigs.k8s.io
        version: v1.30.1
      name: cluster_info
    server: https://127.0.0.1:56709
  name: minikube
contexts:
- context:
    cluster: minikube
    extensions:
    - extension:
        last-update: Wed, 26 Apr 2023 16:32:49 IST
        provider: minikube.sigs.k8s.io
        version: v1.30.1
      name: context_info
    namespace: default
    user: minikube
  name: minikube
current-context: minikube
kind: Config
preferences: {}
users:
- name: minikube
  user:
    client-certificate: C:\Users\hp\.minikube\profiles\minikube\client.crt
    client-key: C:\Users\hp\.minikube\profiles\minikube\client.key
```

CA Command Prompt

```
- name: minikube
  user:
    client-certificate: C:\Users\hp\.minikube\profiles\minikube\client.crt
    client-key: C:\Users\hp\.minikube\profiles\minikube\client.key

C:\Users\hp>kubectl get service
Unable to connect to the server: dial tcp 127.0.0.1:56789: connectex: No connection could be made because the target machine actively refused it.

C:\Users\hp>minikube start
'minikube' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\hp>minikube start
* minikube v1.30.1 on Microsoft Windows 10 Pro 10.0.19045.2846 Build 19045.2846
* Using the docker driver based on existing profile
* Starting control plane node minikube in cluster minikube
* Pulling base image ...
* docker "minikube" container is missing, will recreate.
* Creating docker container (CPUs=2, Memory=4000MB) ...
* Preparing Kubernetes v1.26.3 on Docker 23.0.2 ...
* Configuring bridge CNI (Container Networking Interface) ...
* Verifying Kubernetes components...
  - Using image gcr.io/k8s-minikube/storage-provisioner:v5
* Enabled addons: storage-provisioner, default-storageclass
* Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default

C:\Users\hp>kubectl get service
NAME          TYPE          CLUSTER-IP   EXTERNAL-IP   PORT(S)    AGE
kubernetes    ClusterIP     10.96.0.1    <none>        443/TCP    2d2h

C:\Users\hp>docker pull nginx
Using default tag: latest
latest: Pulling from library/nginx
26c5c85e47da: Pull complete
4f3256bdf66b: Pull complete
2019c71d5655: Pull complete
8c767bdbc9ae: Pull complete
78e14bb05fd3: Pull complete
75576236abf5: Pull complete
Digest: sha256:63b44e8ddb83d5dd8020327c1f40436e37a6fffd3ef2498a6204df23be6e7e94
Status: Downloaded newer image for nginx:latest
```

Command Prompt

Digest: sha256:63b44e8ddb83d5dd8020327c1f40436e37a6ffffd3ef2498a6204df23bee7e94
Status: Downloaded newer image for nginx:latest
docker.io/library/nginx:latest

C:\Users\hp>minikube start

* minikube v1.30.1 on Microsoft Windows 10 Pro 10.0.19045.2846 Build 19045.2846
* Using the docker driver based on existing profile
* Starting control plane node minikube in cluster minikube
* Pulling base image ...
* Updating the running docker "minikube" container ...
* Preparing Kubernetes v1.26.3 on Docker 23.0.2 ...
* Configuring bridge CNI (Container Networking Interface) ...
* Verifying Kubernetes components...
- Using image gcr.io/k8s-minikube/storage-provisioner:v5
* Enabled addons: storage-provisioner
* Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default

C:\Users\hp>docker ps

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS
6cedcb0c69aa	gcr.io/k8s-minikube/kicbase:v0.0.39	"/usr/local/bin/entr..."	5 minutes ago	Up 5 minutes	127.0.0.1:51562->22/tcp, 127.0.0.1:51563->2376/tcp, 127.0.0.1:51560->5000/tcp, 127.0.0.1:51561->8443/tcp, 127.0.0.1:51564->32443/tcp
0c7d6eb943fd	fl2	"/bin/sh -c 'python ..."	38 minutes ago	Up 38 minutes	5000/tcp

C:\Users\hp>create deployment nginx-img --image=nginx

'create' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\hp>kubectl create deployment nginx-img --image=nginx
deployment.apps/nginx-img created

C:\Users\hp>kubectl get deployment

NAME	READY	UP-TO-DATE	AVAILABLE	AGE
nginx-img	0/1	1	0	29s

C:\Users\hp>kubectl get deployment

NAME	READY	UP-TO-DATE	AVAILABLE	AGE
nginx-img	1/1	1	1	69s

C:\Users\hp>kubectl get pod

Command Prompt

```
C:\Users\hp>kubectl get pod
NAME                                READY   STATUS    RESTARTS   AGE
nginx-img-746dfd4b85-bnppw         1/1     Running   0           87s

C:\Users\hp>kubectl get replicaset
NAME                                DESIRED   CURRENT   READY   AGE
nginx-img-746dfd4b85               1         1         1       2m8s

C:\Users\hp>describe deployment
'describe' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\hp>kubectl describe deployment
Name:                               nginx-img
Namespace:                         default
CreationTimestamp:                  Fri, 28 Apr 2023 18:49:39 +0530
Labels:                             app=nginx-img
Annotations:                        deployment.kubernetes.io/revision: 1
Selector:                           app=nginx-img
Replicas:                           1 desired | 1 updated | 1 total | 1 available | 0 unavailable
StrategyType:                       RollingUpdate
MinReadySeconds:                    0
RollingUpdateStrategy:              25% max unavailable, 25% max surge
Pod Template:
  Labels:  app=nginx-img
  Containers:
    nginx:
      Image:          nginx
      Port:            <none>
      Host Port:       <none>
      Environment:     <none>
      Mounts:          <none>
      Volumes:         <none>
  Conditions:
    Type           Status  Reason
    ----           -
    Available       True    MinimumReplicasAvailable
    Progressing     True    NewReplicaSetAvailable
OldReplicaSets: <none>
NewReplicaSet:  nginx-img-746dfd4b85 (1/1 replicas created)
```

```

1  ! f1.yaml
2  apiVersion: apps/v1
3  kind: Deployment
4  metadata:
5    name: helloworld-deployment
6  spec:
7    selector:
8      matchLabels:
9        app: helloworld
10   replicas: 3
11   template:
12     metadata:
13       labels:
14         app: helloworld
15     spec:
16       containers:
17         - name: helloworld
18           image: <your-docker-image>:latest
19           ports:
20             - containerPort: 5000
21 ---
22 apiVersion: v1
23 kind: Service
24 metadata:
25   name: helloworld-service
26 spec:
27   selector:
28     app: helloworld
29   ports:
30     - name: http
31       port: 80

```

Command Prompt

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Type      Reason          Age      From              Message
----      -
Normal    ScalingReplicaSet  2m43s    deployment-controller Scaled up replica set nginx-img-746dfd4b85 to 1

C:\Users\hp>kubectl get deploy -A
NAMESPACE   NAME      READY   UP-TO-DATE   AVAILABLE   AGE
default     nginx-img 1/1      1             1           4m31s
kube-system coredns   1/1      1             1           2d2h

C:\Users\hp>kubectl get pod
NAME                                READY   STATUS    RESTARTS   AGE
nginx-img-746dfd4b85-bnppw          1/1     Running   0           5m29s

C:\Users\hp>kubectl port-forward nginx-img-746dfd4b85-bnppw 8081:8081
Forwarding from 127.0.0.1:8081 -> 8081
Forwarding from [::1]:8081 -> 8081

C:\Users\hp>kubectl apply -f f1.yaml
error: the path "f1.yaml" does not exist

C:\Users\hp>kubectl apply -f "C:\Users\hp\Desktop\flask\f1.yaml"
deployment.apps/helloworld-deployment created
service/helloworld-service created

C:\Users\hp>kubectl get service
NAME                TYPE           CLUSTER-IP   EXTERNAL-IP   PORT(S)          AGE
helloworld-service  LoadBalancer  10.110.72.56 <pending>     80:31086/TCP     50s
kubernetes          ClusterIP      10.96.0.1    <none>        443/TCP          2d2h

C:\Users\hp>kubectl get deployment
NAME                READY   UP-TO-DATE   AVAILABLE   AGE
helloworld-deployment 0/3     3             0           79s
nginx-img            1/1     1             1           26m

C:\Users\hp>kubectl describe deployment helloworld-deployment
Name:                helloworld-deployment
Namespace:            default
CreationTimestamp:    Fri, 28 Apr 2023 19:14:56 +0530
Labels:               <none>
Annotations:          deployment.kubernetes.io/revision: 1
Selector:              app=helloworld

```

CA Command Prompt

```
Namespace: default
CreationTimestamp: Fri, 28 Apr 2023 19:14:56 +0530
Labels: <none>
Annotations: deployment.kubernetes.io/revision: 1
Selector: app=helloworld
Replicas: 3 desired | 3 updated | 3 total | 0 available | 3 unavailable
StrategyType: RollingUpdate
MinReadySeconds: 0
RollingUpdateStrategy: 25% max unavailable, 25% max surge
Pod Template:
  Labels: app=helloworld
  Containers:
    helloworld:
      Image: <your-docker-image>:latest
      Port: 5000/TCP
      Host Port: 0/TCP
      Environment: <none>
      Mounts: <none>
      Volumes: <none>
  Conditions:
    Type           Status  Reason
    ----           -
    Available       False   MinimumReplicasUnavailable
    Progressing     True    ReplicaSetUpdated
OldReplicaSets: <none>
NewReplicaSet: helloworld-deployment-7dd6dbb864 (3/3 replicas created)
Events:
  Type    Reason             Age   From                  Message
  ----    -
  Normal  ScalingReplicaSet  2m33s deployment-controller Scaled up replica set helloworld-deployment-7dd6dbb864 to 3

C:\Users\hp>
```