```
Terminal
$ minikube start --wait=false

    minikube v1.8.1 on Ubuntu 18.04

* Using the none driver based on user configuration
kubectl get nodes
kubectl run http --image=katacoda/docker-http-server:latest --replicas=1
kubectl get deployments
kubectl describe deployment http
kubectl expose deployment http --external-ip="172.17.0.40" --port=8000 --target-port=80
curl http://172.17.0.40:8000
* Running on localhost (CPUs=2, Memory=2460MB, Disk=145651MB) ...
* OS release is Ubuntu 18.04.4 LTS
kubectl run httpexposed --image=katacoda/docker-http-server:latest --replicas=1 --port=80 --hostport=8001
curl http://172.17.0.40:8001
kubectl get svc
* Preparing Kubernetes v1.17.3 on Docker 19.03.6 ...
  - kubelet.resolv-conf=/run/systemd/resolve/resolv.conf
* Launching Kubernetes ...
docker ps | grep httpexposed
* Enabling addons: default-storageclass, storage-provisioner
* Configuring local host environment ...
* Done! kubectl is now configured to use "minikube"
$ kubectl get nodes
NAME.
           STATUS
                    ROLES
                                   VERSTON
                    master
                             6з
                                   v1.17.3
minikube
           Ready
$ kubectl run http --image=katacoda/docker-http-server:latest --replicas=1
kubectl run --qenerator=deployment/apps.v1 is DEPRECATED and will be removed in a future version. Use kubectl run --qenerator=run-pod/v1 or kubectl c
reate instead.
deployment.apps/http created
$ kubectl get deployments
NAME
      READY
               UP-TO-DATE
                           AVATLABLE
                                        AGE
       0/1
                                         0з
http
$ kubectl describe deployment http
Name:
                        http
                        default
Namespace:
CreationTimestamp:
                        Mon, 22 Mar 2021 14:57:59 +0000
Labels:
                        run=http
Annotations:
                        <none>
Selector:
                        run=http
```

1 desired | 0 updated | 0 total | 0 available | 0 unavailable

Replicas:

StrategyType:

MinReadySeconds:

RollingUpdate

```
Terminal
Selector:
                        run=http
Replicas:
                        1 desired | 0 updated | 0 total | 0 available | 0 unavailable
StrategyType:
                        RollingUpdate
MinReadySeconds:
RollingUpdateStrategy: 25% max unavailable, 25% max surge
Pod Template:
  Labels: run=http
  Containers:
   http:
    Image:
                  katacoda/docker-http-server:latest
    Port:
                  <none>
    Host Port:
                  <none>
    Environment: <none>
    Mounts:
                  <none>
  Volumes:
                  <none>
OldReplicaSets:
                  <none>
NewReplicaSet:
                  <none>
Events:
$ kubectl expose deployment http --external-ip="172.17.0.40" --port=8000 --target-port=80
service/http exposed
$ curl http://172.17.0.40:8000
curl: (7) Failed to connect to 172.17.0.40 port 8000: Connection refused
$ kubectl run httpexposed --image=katacoda/docker-http-server:latest --replicas=1 --port=80 --hostport=8001
kubectl run --qenerator=deployment/apps.v1 is DEPRECATED and will be removed in a future version. Use kubectl run --qenerator=run-pod/v1 or kubectl c
reate instead.
deployment.apps/httpexposed created
$ curl http://172.17.0.40:8001
curl: (7) Failed to connect to 172.17.0.40 port 8001: Connection refused
$ kubectl get svc
NAME
             TYPE
                         CLUSTER-IP
                                          EXTERNAL-IP
                                                                    AGE
                                                        PORT(S)
             ClusterIP
                         10.102.38.164
                                          172.17.0.40
                                                        8000/TCP
                                                                    0з
http
kubernetes ClusterIP
                         10.96.0.1
                                          <none>
                                                        443/TCP
                                                                    53
$ docker ps | grep httpexposed
$ kubectl scale --replicas=3 deployment http
deployment.apps/http scaled
$ kubectl get pods
NAME
                              READY
                                       STATUS
                                                 RESTARTS
                                                            AGE
                                                            23
http-774bb756bb-fp9kb
                              0/1
                                       Pending
http-774bb756bb-lrr5q
                              0/1
                                       Pending
                                                 0
                                                            23
http-774bb756bb-x8rds
                              0/1
                                       Pending
                                                 0
                                                            6з
httpexposed-68cb8c8d4-z5m4c
                              0/1
                                       Pending
                                                 0
                                                            6з
$ kubectl describe svc http
Name:
                   http
```

```
Terminal
OldReplicaSets:
                  <none>
NewReplicaSet:
                  <none>
Events:
                  <none>
$ kubectl expose deployment http --external-ip="172.17.0.40" --port=8000 --target-port=80
service/http exposed
$ curl http://172.17.0.40:8000
curl: (7) Failed to connect to 172.17.0.40 port 8000: Connection refused
$ kubectl run httpexposed --image=katacoda/docker-http-server:latest --replicas=1 --port=80 --hostport=8001
kubectl run --generator=deployment/apps.v1 is DEPRECATED and will be removed in a future version. Use kubectl run --generator=run-pod/v1 or kubectl c
reate instead.
deployment.apps/httpexposed created
$ curl http://172.17.0.40:8001
curl: (7) Failed to connect to 172.17.0.40 port 8001: Connection refused
$ kubectl get svc
NAME
                         CLUSTER-IP
                                          EXTERNAL-IP
                                                        PORT(S)
                                                                    AGE
                         10.102.38.164
                                          172.17.0.40
                                                        8000/TCP
http
             ClusterIP
                                                                    0s
kubernetes
             ClusterIP
                         10.96.0.1
                                          <none>
                                                        443/TCP
                                                                    5s
$ docker ps | grep httpexposed
$ kubectl scale --replicas=3 deployment http
deployment.apps/http scaled
$ kubectl get pods
NAME
                              READY
                                       STATUS
                                                 RESTARTS
                                                            AGE
http-774bb756bb-fp9kb
                              0/1
                                                            23
                                       Pending
                                                 0
http-774bb756bb-lrr5q
                              0/1
                                       Pending
                                                 0
                                                            2s
http-774bb756bb-x8rds
                              0/1
                                       Pending
                                                 0
                                                            63
httpexposed-68cb8c8d4-z5m4c
                              0/1
                                       Pending
                                                 0
                                                            6з
$ kubectl describe svc http
Name:
                   http
Namespace:
                   default
Labels:
                   run=http
Annotations:
                   <none>
Selector:
                   run=http
                   ClusterIP
Type:
                   10.102.38.164
IP:
External IPs:
                   172.17.0.40
                   <unset> 8000/TCP
Port:
TargetPort:
                   80/TCP
Endpoints:
                   <none>
Session Affinity:
                   None
Events:
                   <none>
$ curl http://172.17.0.40:8000
<h1>This request was processed by host: http-774bb756bb-lrr5q</h1>
```