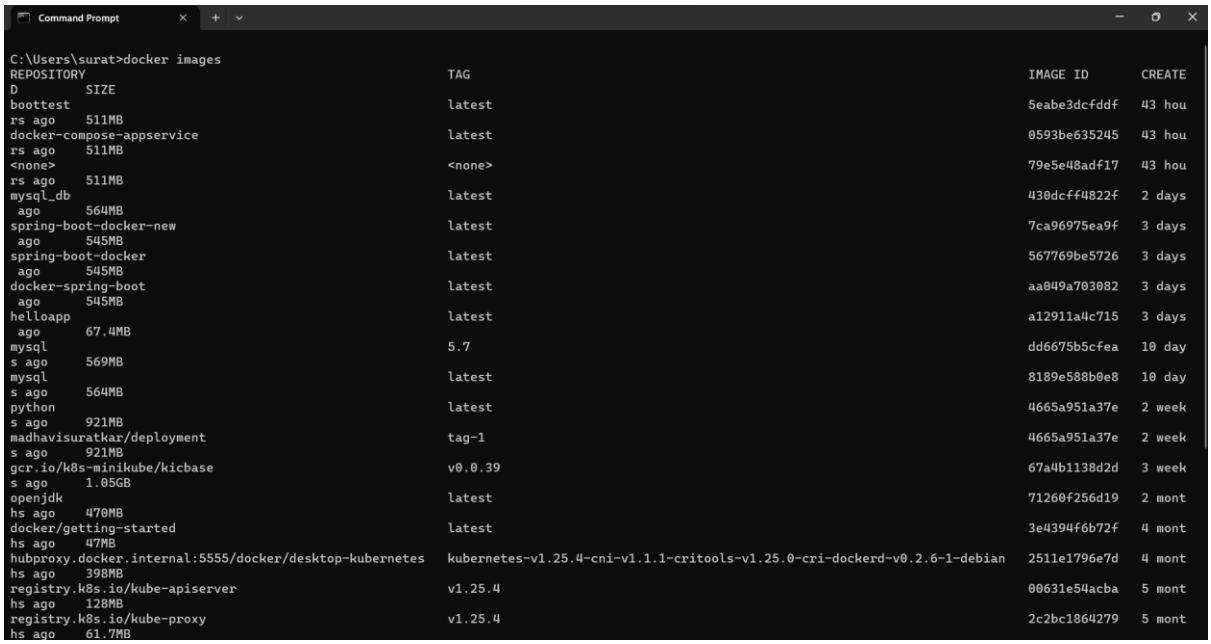
Name : Madhavi Suratkar

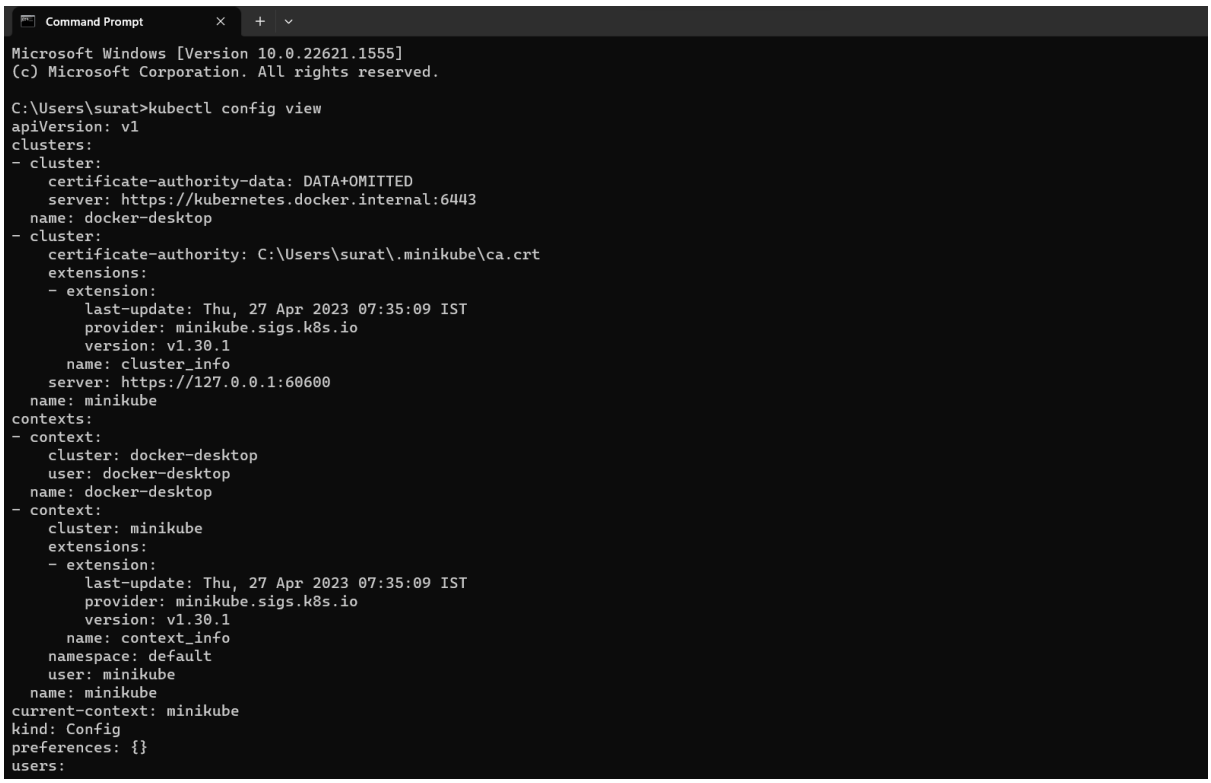
Topic : Kubernetes Commands

Date : 28-04-2023

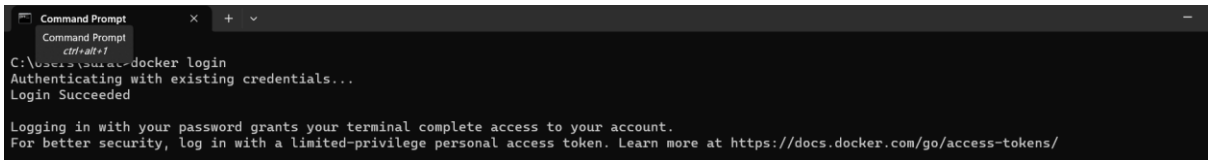
Commands:



```
Command Prompt

C:\Users\surat>docker images
REPOSITORY                                          TAG                                                IMAGE ID       CREATE
D       SIZE
boottest                                            latest                                             5eabe3dcfddf   43 hou
rs ago    511MB
docker-compose-appservice                           latest                                             0593be635245   43 hou
rs ago    511MB
<none>                                              <none>                                             79e5e48adf17   43 hou
rs ago    511MB
mysql_db                                            latest                                             430dcff4822f   2 days
 ago      564MB
spring-boot-docker-new                              latest                                             7ca96975ea9f   3 days
 ago      545MB
spring-boot-docker                                  latest                                             567769be5726   3 days
 ago      545MB
docker-spring-boot                                  latest                                             aa049a703082   3 days
 ago      545MB
helloapp                                            latest                                             a12911a4c715   3 days
 ago      67.4MB
mysql                                               5.7                                                dd6675b5cfea   10 day
s ago     569MB
mysql                                               latest                                             8189e588b0e8   10 day
s ago     564MB
python                                              latest                                             4665a951a37e   2 week
s ago     921MB
madhavisuratkar/deployment                          tag-1                                              4665a951a37e   2 week
s ago     921MB
gcr.io/k8s-minikube/kicbase                         v0.0.39                                            67a4b1138d2d   3 week
s ago     1.05GB
openjdk                                             latest                                             71260f256d19   2 mont
hs ago    470MB
docker/getting-started                              latest                                             3e4394f6b72f   4 mont
hs ago    47MB
hubproxy.docker.internal:5555/docker/desktop-kubernetes   kubernetes-v1.25.4-cni-v1.1.1-critools-v1.25.0-cri-dockerd-v0.2.6-1-debian   2511e1796e7d   4 mont
hs ago    398MB
registry.k8s.io/kube-apiserver                      v1.25.4                                            00631e54acba   5 mont
hs ago    128MB
registry.k8s.io/kube-proxy                          v1.25.4                                            2c2bc1864279   5 mont
hs ago    61.7MB
```

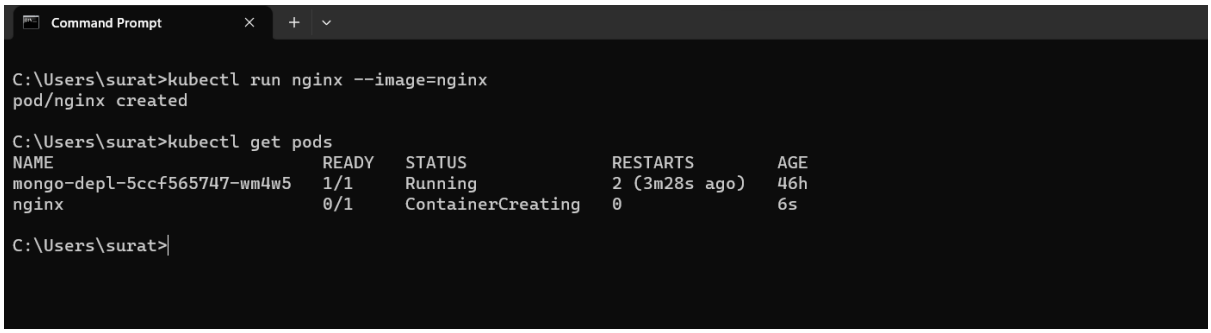


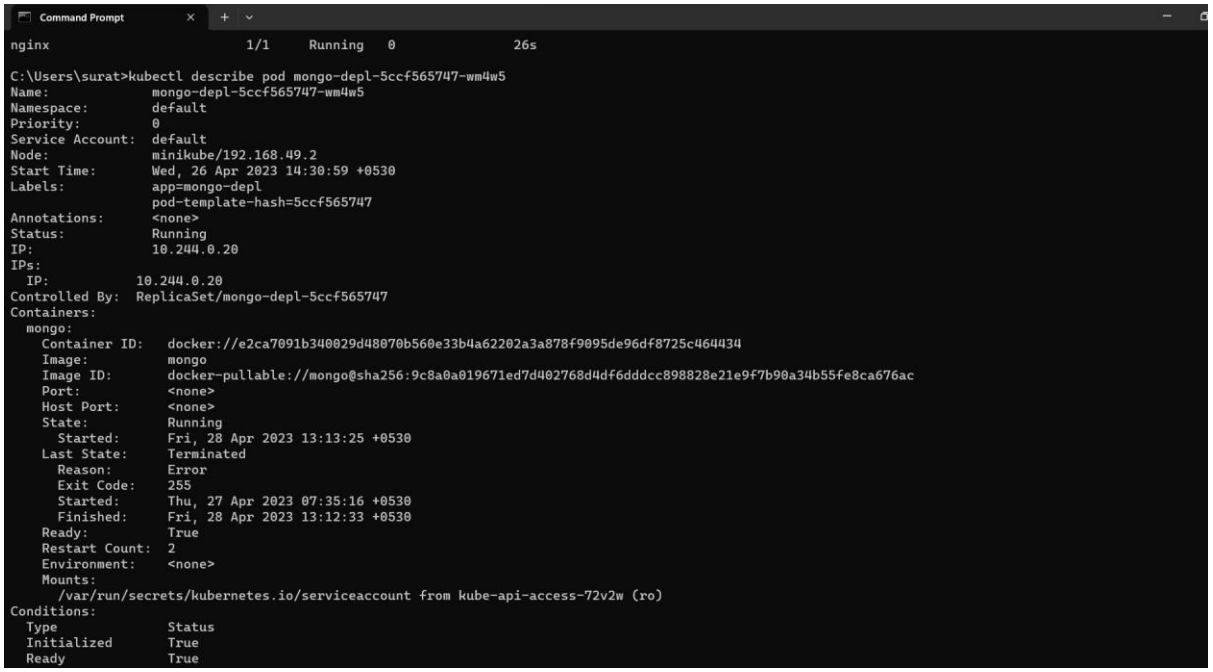
```
Command Prompt

Microsoft Windows [Version 10.0.22621.1555]
(c) Microsoft Corporation. All rights reserved.

C:\Users\surat>kubectl config view
apiVersion: v1
clusters:
- cluster:
    certificate-authority-data: DATA+OMITTED
    server: https://kubernetes.docker.internal:6443
  name: docker-desktop
- cluster:
    certificate-authority: C:\Users\surat\.minikube\ca.crt
    extensions:
    - extension:
        last-update: Thu, 27 Apr 2023 07:35:09 IST
        provider: minikube.sigs.k8s.io
        version: v1.30.1
      name: cluster_info
    server: https://127.0.0.1:60600
  name: minikube
contexts:
- context:
    cluster: docker-desktop
    user: docker-desktop
  name: docker-desktop
- context:
    cluster: minikube
    extensions:
    - extension:
        last-update: Thu, 27 Apr 2023 07:35:09 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:
```




```
C:\Users\surat>minikube start
* minikube v1.30.1 on Microsoft Windows 11 Home Single Language 10.0.22621.1555 Build 22621.1555
* Using the docker driver based on existing profile
* Starting control plane node minikube in cluster minikube
* Pulling base image ...
* Restarting existing docker container for "minikube" ...
* 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
  - Using image docker.io/kubernetesui/dashboard:v2.7.0
  - Using image docker.io/kubernetesui/metrics-scraper:v1.0.8
* Some dashboard features require the metrics-server addon. To enable all features please run:

        minikube addons enable metrics-server


* Enabled addons: storage-provisioner, default-storageclass, dashboard
* Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
```

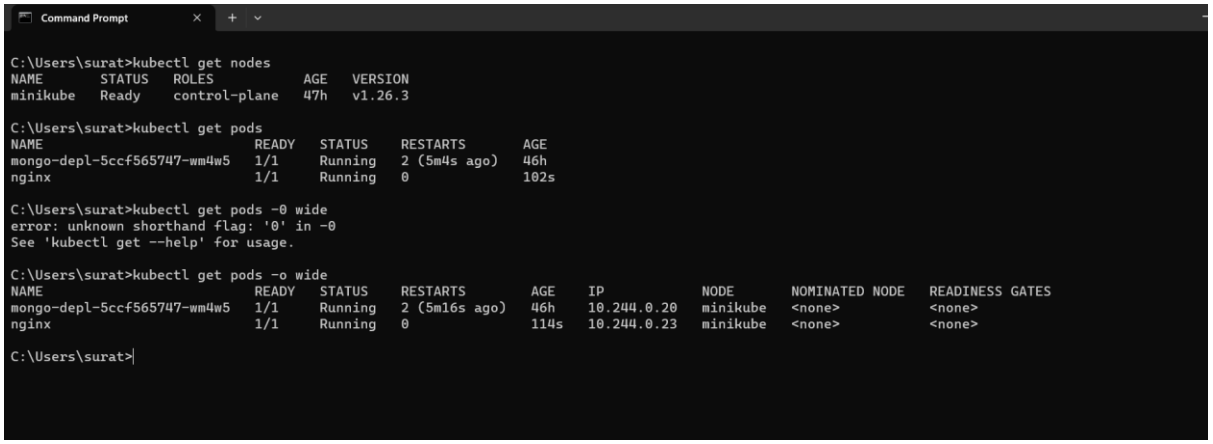
```
C:\Users\surat>kubectl get pods
NAME                           READY   STATUS    RESTARTS        AGE
mongo-depl-5ccf565747-wm4w5    1/1     Running   2 (2m38s ago)   46h
```





```
Command Prompt
nginx                       1/1     Running   0              26s

C:\Users\surat>kubectl describe pod mongo-depl-5ccf565747-wm4w5
Name:             mongo-depl-5ccf565747-wm4w5
Namespace:        default
Priority:         0
Service Account:  default
Node:             minikube/192.168.49.2
Start Time:       Wed, 26 Apr 2023 14:30:59 +0530
Labels:           app=mongo-depl
                  pod-template-hash=5ccf565747
Annotations:      <none>
Status:           Running
IP:               10.244.0.20
IPs:
  IP:           10.244.0.20
Controlled By:  ReplicaSet/mongo-depl-5ccf565747
Containers:
  mongo:
    Container ID:   docker://e2ca7091b340029d48070b560e33b4a62202a3a878f9095de96df8725c464434
    Image:          mongo
    Image ID:       docker-pullable://mongo@sha256:9c8a0a019671ed7d402768d4df6dddcc898828e21e9f7b90a34b55fe8ca676ac
    Port:           <none>
    Host Port:      <none>
    State:          Running
      Started:      Fri, 28 Apr 2023 13:13:25 +0530
    Last State:     Terminated
      Reason:       Error
      Exit Code:    255
      Started:      Thu, 27 Apr 2023 07:35:16 +0530
      Finished:     Fri, 28 Apr 2023 13:12:33 +0530
    Ready:          True
    Restart Count:  2
    Environment:    <none>
    Mounts:
      /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-72v2w (ro)
Conditions:
  Type              Status
  Initialized       True
  Ready             True
```

```
Command Prompt

C:\Users\surat>kubectl get nodes
NAME       STATUS   ROLES           AGE   VERSION
minikube   Ready    control-plane   47h   v1.26.3

C:\Users\surat>
```



```
Command Prompt

C:\Users\surat>kubectl get nodes
NAME       STATUS   ROLES           AGE   VERSION
minikube   Ready    control-plane   47h   v1.26.3

C:\Users\surat>kubectl get pods
NAME                        READY   STATUS    RESTARTS       AGE
mongo-depl-5ccf565747-wm4w5   1/1     Running   2 (5m4s ago)   46h
nginx                       1/1     Running   0              102s

C:\Users\surat>kubectl get pods -0 wide
error: unknown shorthand flag: '0' in -0
See 'kubectl get --help' for usage.

C:\Users\surat>kubectl get pods -o wide
NAME                        READY   STATUS    RESTARTS        AGE    IP            NODE       NOMINATED NODE   READINESS GATES
mongo-depl-5ccf565747-wm4w5   1/1     Running   2 (5m16s ago)   46h    10.244.0.20   minikube   <none>           <none>
nginx                       1/1     Running   0               114s   10.244.0.23   minikube   <none>           <none>

C:\Users\surat>
```

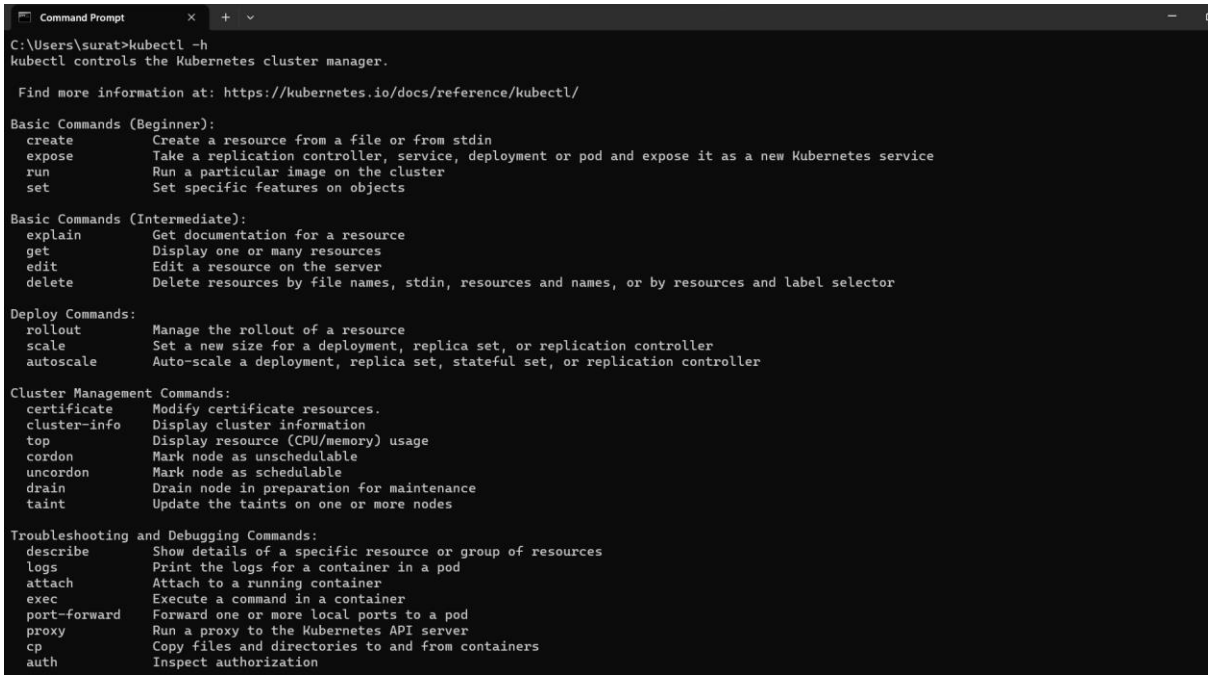
```
C:\Users\surat>kubectl describe pod mongo-depl-5ccf565747-wm4w5
Name:             mongo-depl-5ccf565747-wm4w5
Namespace:        default
Priority:         0
Service Account:  default
Node:             minikube/192.168.49.2
Start Time:       Wed, 26 Apr 2023 14:30:59 +0530
Labels:           app=mongo-depl
                  pod-template-hash=5ccf565747
Annotations:      <none>
Status:           Running
IP:               10.244.0.20
IPs:
  IP:           10.244.0.20
Controlled By:  ReplicaSet/mongo-depl-5ccf565747
Containers:
  mongo:
    Container ID:   docker://e2ca7091b340029d48070b560e33b4a62202a3a878f9095de96df8725c464434
    Image:          mongo
    Image ID:       docker-pullable://mongo@sha256:9c8a0a019671ed7d402768d4df6dddcc898828e21e9f7b90a34b55fe8ca676ac
    Port:           <none>
    Host Port:      <none>
    State:          Running
      Started:      Fri, 28 Apr 2023 13:13:25 +0530
    Last State:     Terminated
      Reason:       Error
      Exit Code:    255
      Started:      Thu, 27 Apr 2023 07:35:16 +0530
      Finished:     Fri, 28 Apr 2023 13:12:33 +0530
    Ready:          True
    Restart Count:  2
    Environment:    <none>
    Mounts:
      /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-72v2w (ro)
Conditions:
```

```
Command Prompt
    Environment:    <none>
    Mounts:
      /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-72v2w (ro)
Conditions:
  Type              Status
  Initialized       True
  Ready             True
  ContainersReady   True
  PodScheduled      True
Volumes:
  kube-api-access-72v2w:
    Type:                    Projected (a volume that contains injected data from multiple sources)
    TokenExpirationSeconds:  3607
    ConfigMapName:           kube-root-ca.crt
    ConfigMapOptional:       <nil>
    DownwardAPI:             true
QoS Class:                   BestEffort
Node-Selectors:              <none>
Tolerations:                 node.kubernetes.io/not-ready:NoExecute op=Exists for 300s
                             node.kubernetes.io/unreachable:NoExecute op=Exists for 300s

Events:
  Type    Reason          Age    From               Message
  ----    ------          ----   ----               -------
  Normal  Scheduled       46h    default-scheduler  Successfully assigned default/mongo-depl-5ccf565747-wm4w5 to minikube
  Normal  Pulling         46h    kubelet            Pulling image "mongo"
  Normal  Pulled          46h    kubelet            Successfully pulled image "mongo" in 39.996455965s (39.99647504s including waiting)
  Normal  Created         46h    kubelet            Created container mongo
  Normal  Started         46h    kubelet            Started container mongo
  Normal  SandboxChanged  29h    kubelet            Pod sandbox changed, it will be killed and re-created.
  Normal  Pulling         29h    kubelet            Pulling image "mongo"
  Normal  Pulled          29h    kubelet            Successfully pulled image "mongo" in 3.806050129s (3.806080166s including waiting)
  Normal  Created         29h    kubelet            Created container mongo
  Normal  Started         29h    kubelet            Started container mongo
  Normal  SandboxChanged  5m43s  kubelet            Pod sandbox changed, it will be killed and re-created.
  Normal  Pulling         5m38s  kubelet            Pulling image "mongo"
  Normal  Pulled          5m33s  kubelet            Successfully pulled image "mongo" in 5.197122778s (5.197143256s including waiting)
  Normal  Created         5m33s  kubelet            Created container mongo
  Normal  Started         5m32s  kubelet            Started container mongo

C:\Users\surat>
```

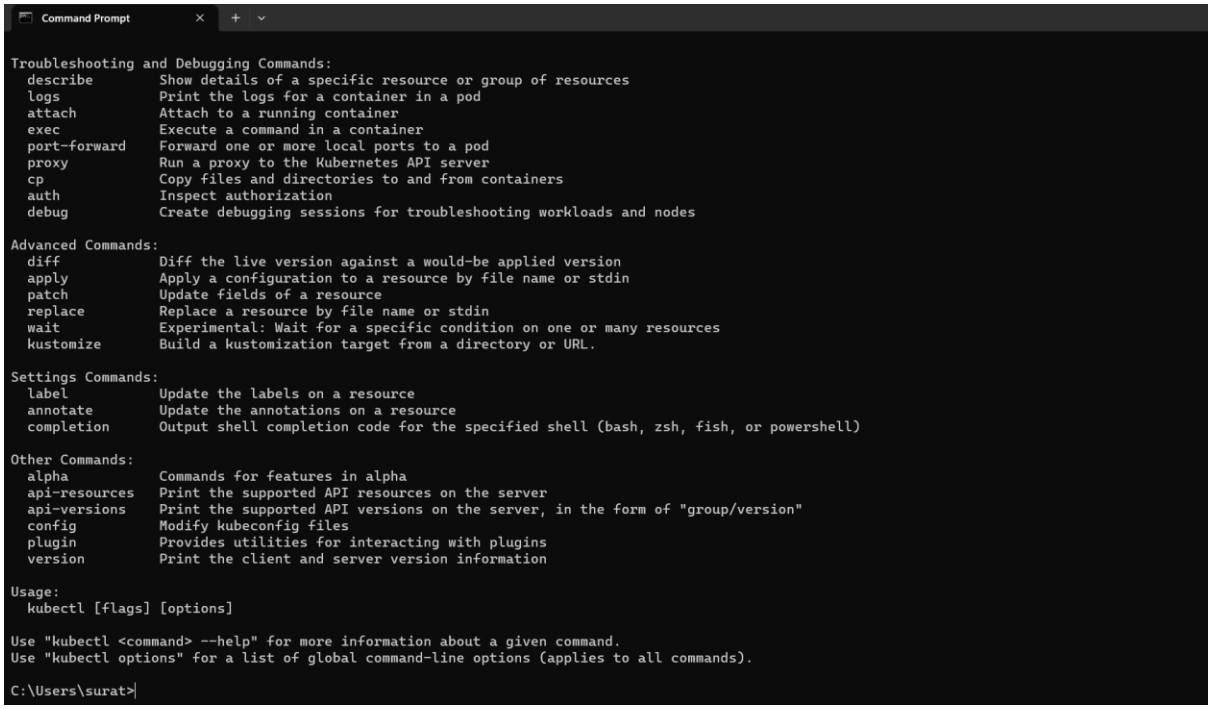
```
C:\Users\surat>kubectl get pods
NAME                          READY   STATUS    RESTARTS        AGE
mongo-depl-5ccf565747-wm4w5   1/1     Running   2 (7m31s ago)   46h
nginx                         1/1     Running   0               4m9s

C:\Users\surat>S
```

```
C:\Users\surat>kubectl get replicaset
NAME                    DESIRED   CURRENT   READY   AGE
mongo-depl-5ccf565747   1         1         1       46h

C:\Users\surat>kubectl get pods
NAME                          READY   STATUS    RESTARTS        AGE
mongo-depl-5ccf565747-wm4w5   1/1     Running   2 (8m41s ago)   46h
nginx                         1/1     Running   0               5m19s

C:\Users\surat>kubectl get rs
NAME                    DESIRED   CURRENT   READY   AGE
mongo-depl-5ccf565747   1         1         1       46h

C:\Users\surat>
```

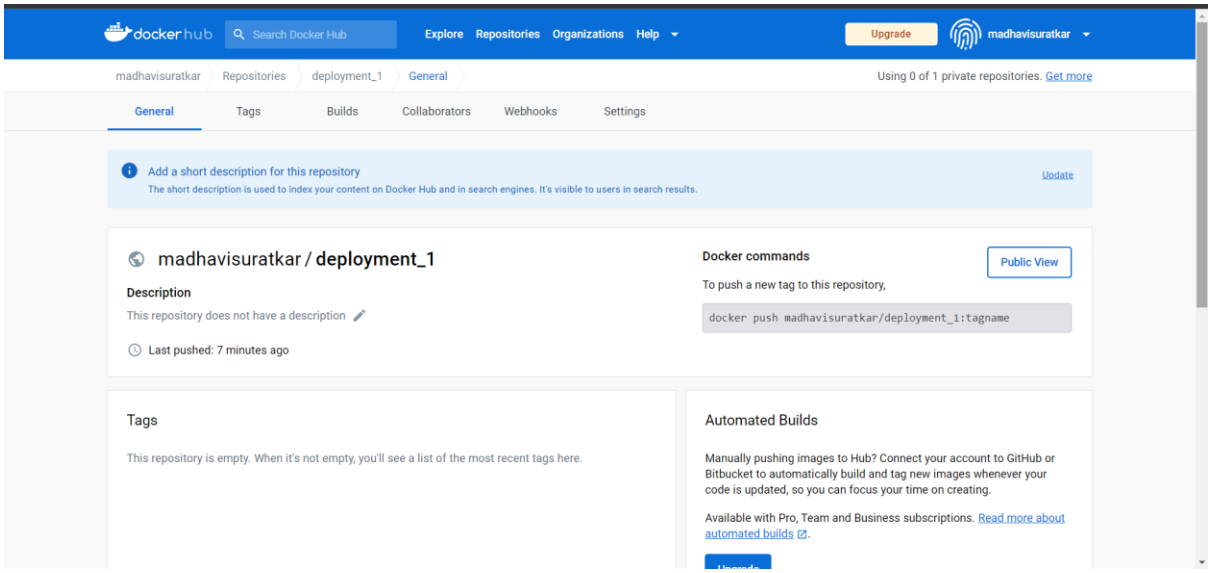
```
C:\Users\surat>kubectl get service
NAME         TYPE        CLUSTER-IP   EXTERNAL-IP   PORT(S)   AGE
kubernetes   ClusterIP   10.96.0.1    <none>        443/TCP   2d

C:\Users\surat>
```



```
```



Repository Creation



```
C:\Users\surat>kubectl get all --all-namespaces
NAMESPACE              NAME                                                READY   STATUS    RESTARTS      AGE
default                pod/mongo-depl-5ccf565747-wm4w5                     1/1     Running   2 (28m ago)   47h
default                pod/nginx                                           1/1     Running   0             25m
kube-system            pod/coredns-787d4945fb-7vbxd                        1/1     Running   6 (28m ago)   2d
kube-system            pod/etcd-minikube                                   1/1     Running   6 (28m ago)   2d
kube-system            pod/kube-apiserver-minikube                         1/1     Running   5 (28m ago)   2d
kube-system            pod/kube-controller-manager-minikube                1/1     Running   6 (28m ago)   2d
kube-system            pod/kube-proxy-6kf9w                                1/1     Running   6 (28m ago)   2d
kube-system            pod/kube-scheduler-minikube                         1/1     Running   6 (28m ago)   2d
kube-system            pod/storage-provisioner                             1/1     Running   9 (27m ago)   2d
kubernetes-dashboard   pod/dashboard-metrics-scraper-5c6664855-cx6gw       1/1     Running   4 (28m ago)   47h
kubernetes-dashboard   pod/kubernetes-dashboard-55c4cbbc7c-h42d7           1/1     Running   4 (28m ago)   47h

NAMESPACE              NAME                                TYPE        CLUSTER-IP      EXTERNAL-IP   PORT(S)                  AGE
default                service/kubernetes                  ClusterIP   10.96.0.1       <none>        443/TCP                  2d
kube-system            service/kube-dns                    ClusterIP   10.96.0.10      <none>        53/UDP,53/TCP,9153/TCP   2d
kubernetes-dashboard   service/dashboard-metrics-scraper   ClusterIP   10.107.18.201   <none>        8000/TCP                 47h
kubernetes-dashboard   service/kubernetes-dashboard        ClusterIP   10.97.24.171    <none>        80/TCP                   47h

NAMESPACE     NAME                        DESIRED   CURRENT   READY   UP-TO-DATE   AVAILABLE   NODE SELECTOR            AGE
kube-system   daemonset.apps/kube-proxy   1         1         1       1            1           kubernetes.io/os=linux   2d

NAMESPACE              NAME                                          READY   UP-TO-DATE   AVAILABLE   AGE
default                deployment.apps/mongo-depl                    1/1     1            1           47h
kube-system            deployment.apps/coredns                       1/1     1            1           2d
kubernetes-dashboard   deployment.apps/dashboard-metrics-scraper     1/1     1            1           47h
kubernetes-dashboard   deployment.apps/kubernetes-dashboard          1/1     1            1           47h

NAMESPACE              NAME                                                DESIRED   CURRENT   READY   AGE
default                replicaset.apps/mongo-depl-5ccf565747               1         1         1       47h
kube-system            replicaset.apps/coredns-787d4945fb                  1         1         1       2d
kubernetes-dashboard   replicaset.apps/dashboard-metrics-scraper-5c6664855   1         1         1       47h
kubernetes-dashboard   replicaset.apps/kubernetes-dashboard-55c4cbbc7c     1         1         1       47h

C:\Users\surat>
```

```
C:\Users\surat>kubectl get deployment
NAME          READY   UP-TO-DATE   AVAILABLE   AGE
mongo-depl    1/1     1            1           47h

C:\Users\surat>
```