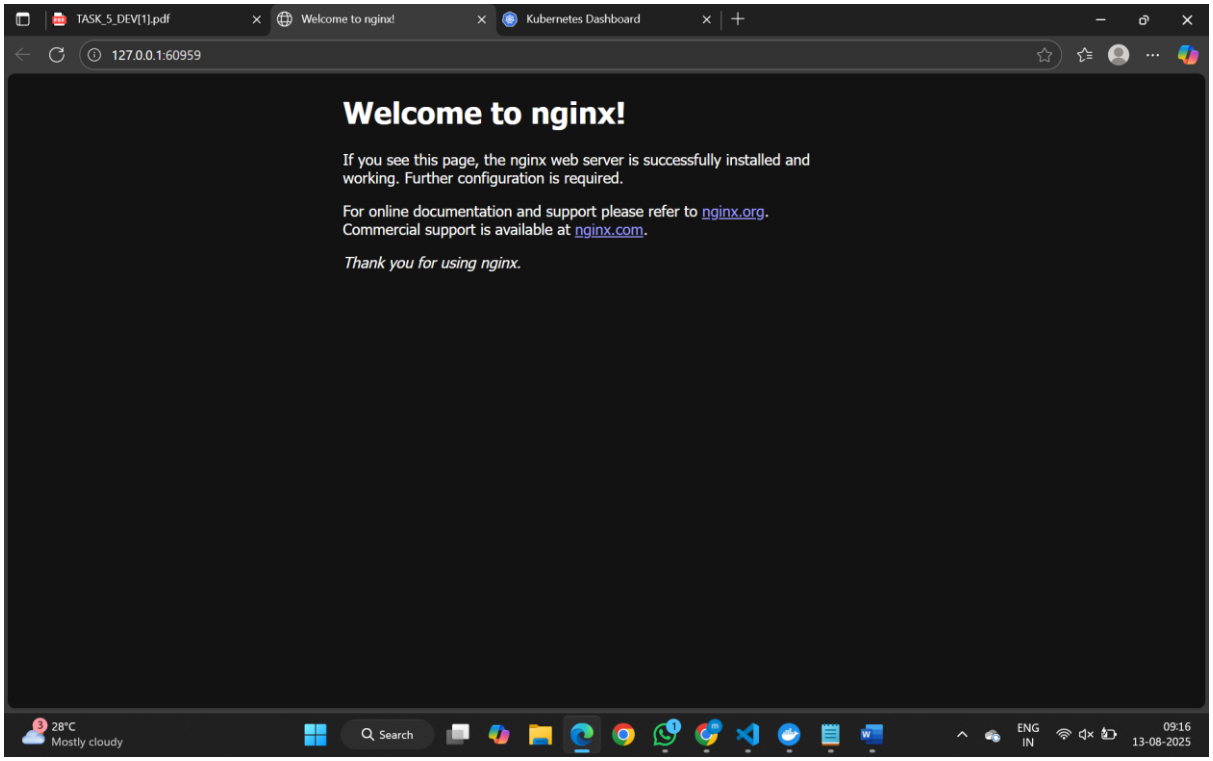
```
PS C:\Users\mansi\OneDrive\Desktop\Internship\Task-5> minikube start
😄  minikube v1.31.2 on Microsoft Windows 11 Home Single Language 10.0.26100.4770 Build 26100.4770
✨  Using the docker driver based on existing profile
👍  Starting control plane node minikube in cluster minikube
🚜  Pulling base image ...
🔄  Restarting existing docker container for "minikube" ...
🐳  Preparing Kubernetes v1.27.4 on Docker 24.0.4 ...
🔗  Configuring bridge CNI (Container Networking Interface) ...
🔎  Verifying Kubernetes components...
    ▪ Using image docker.io/kubernetesui/metrics-scraper:v1.0.8
    ▪ Using image docker.io/kubernetesui/dashboard:v2.7.0
    ▪ Using image gcr.io/k8s-minikube/storage-provisioner:v5
💡  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

❗  C:\Program Files\Docker\Docker\resources\bin\kubectl.exe is version 1.32.2, which may have incompatibilities with Kubernetes 1.
27.4.
    ▪ Want kubectl v1.27.4? Try 'minikube kubectl -- get pods -A'
🏄  Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
```

```
PS C:\Users\mansi\OneDrive\Desktop\Internship\Task-5> minikube status
minikube
type: Control Plane
host: Running
kubelet: Running
apiserver: Running
type: Control Plane
host: Running
kubelet: Running
apiserver: Running
host: Running
kubelet: Running
apiserver: Running
apiserver: Running
kubeconfig: Configured
```

```
PS C:\Users\mansi\OneDrive\Desktop\Internship\Task-5> kubectl apply -f .\deployment.yaml
deployment.apps/nginx-deployment created
```

```
PS C:\Users\mansi\OneDrive\Desktop\Internship\Task-5> kubectl apply -f .\service.yaml
service/nginx-service configured
```

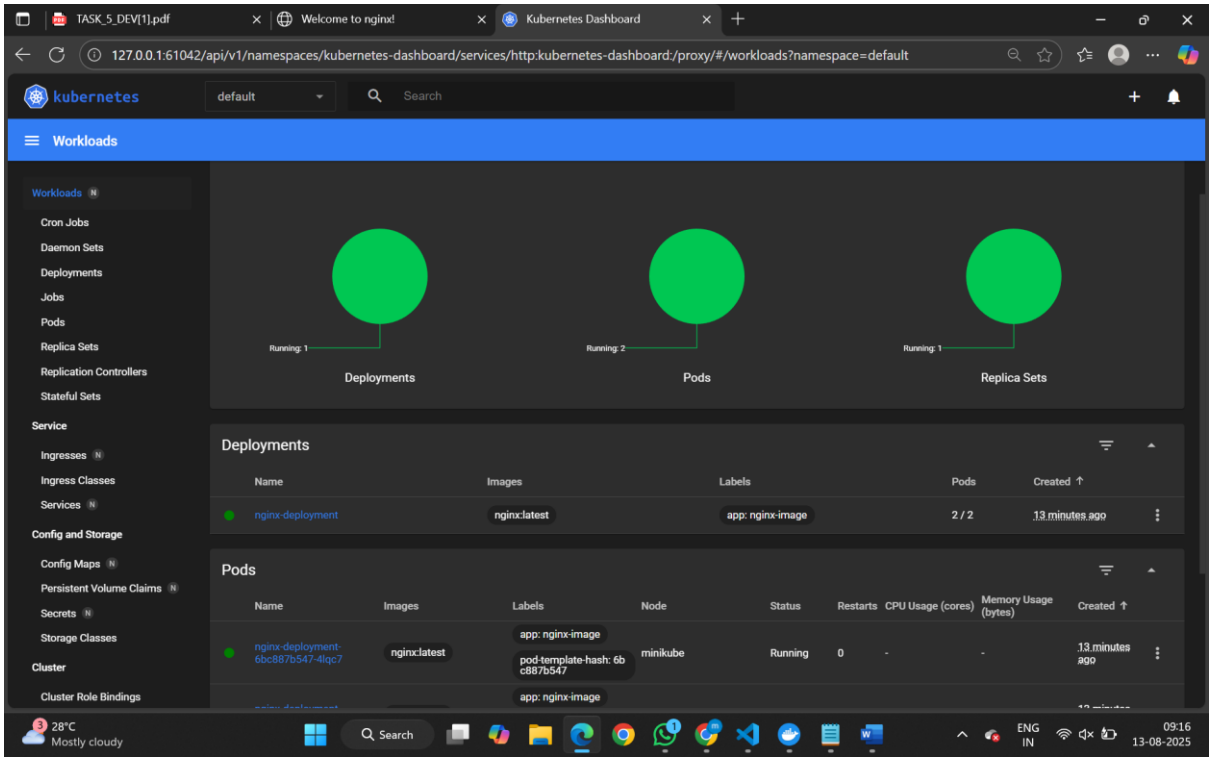
```
PS C:\Users\mansi\OneDrive\Desktop\Internship\Task-5> kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
nginx-deployment-6bc887b547-4lqc7   1/1     Running   0          3m10s
nginx-deployment-6bc887b547-xxj9f   1/1     Running   0          3m10s
PS C:\Users\mansi\OneDrive\Desktop\Internship\Task-5> kubectl get svc
| NAMESPACE |     NAME      | TARGET PORT |            URL             |
|-----------|---------------|-------------|----------------------------|
| default   | nginx-service |          80 | http://192.168.49.2:30007  |
|-----------|---------------|-------------|----------------------------|
🏃  Starting tunnel for service nginx-service.
|-----------|---------------|-------------|------------------------|
| NAMESPACE |     NAME      | TARGET PORT |          URL           |
|-----------|---------------|-------------|------------------------|
| default   | nginx-service |             | http://127.0.0.1:60959 |
|-----------|---------------|-------------|------------------------|
🎉  Opening service default/nginx-service in default browser...
❗  Because you are using a Docker driver on windows, the terminal needs to be open to run it.
```

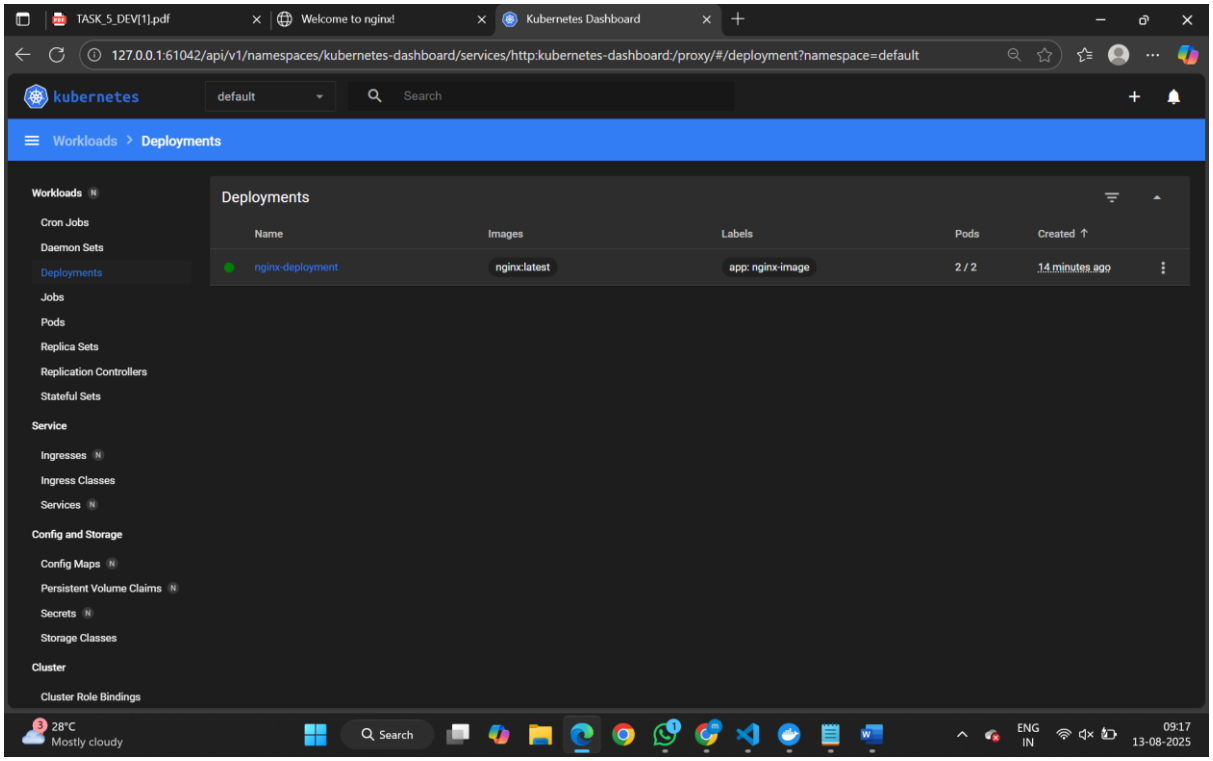


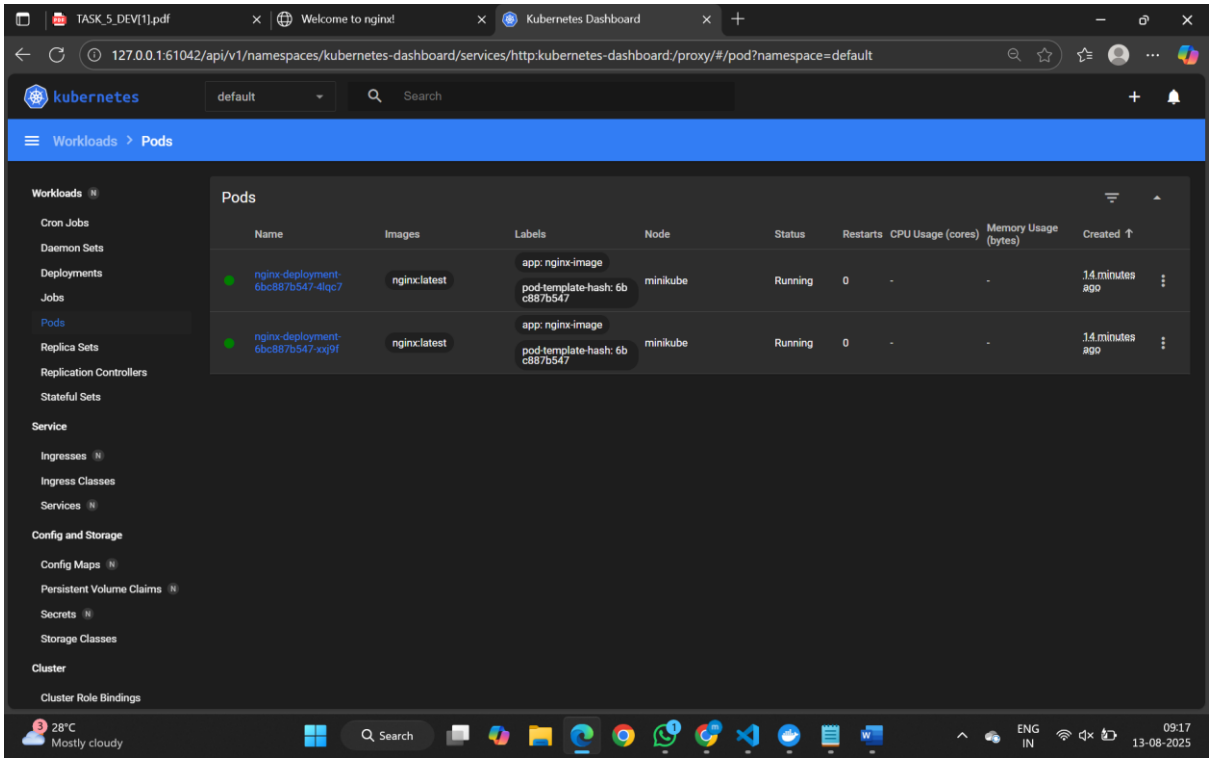

```
PS C:\Users\mansi\OneDrive\Desktop\Internship\Task-5> kubectl describe deployment nginx-deployment
Name:                   nginx-deployment
Namespace:              default
CreationTimestamp:      Wed, 13 Aug 2025 09:02:45 +0530
Labels:                 app=nginx-image
Annotations:            deployment.kubernetes.io/revision: 1
Selector:               app=nginx-image
Replicas:               2 desired | 2 updated | 2 total | 2 available | 0 unavailable
StrategyType:           RollingUpdate
MinReadySeconds:        0
RollingUpdateStrategy:  25% max unavailable, 25% max surge
Pod Template:
  Labels:  app=nginx-image
  Containers:
   nginx-image:
    Image:      nginx:latest
    Port:       80/TCP
    Host Port:  0/TCP
    Limits:
      cpu:     200m
      memory:  200Mi
    Requests:
      cpu:         200m
      memory:      200Mi
    Environment:   <none>
    Mounts:        <none>
  Volumes:         <none>
  Node-Selectors:  <none>
  Tolerations:     <none>
Conditions:
  Type           Status  Reason
  ----           ------  ------
  Available      True    MinimumReplicasAvailable
  Progressing    True    NewReplicaSetAvailable
OldReplicaSets:  <none>
NewReplicaSet:   nginx-deployment-6bc887b547 (2/2 replicas created)
```

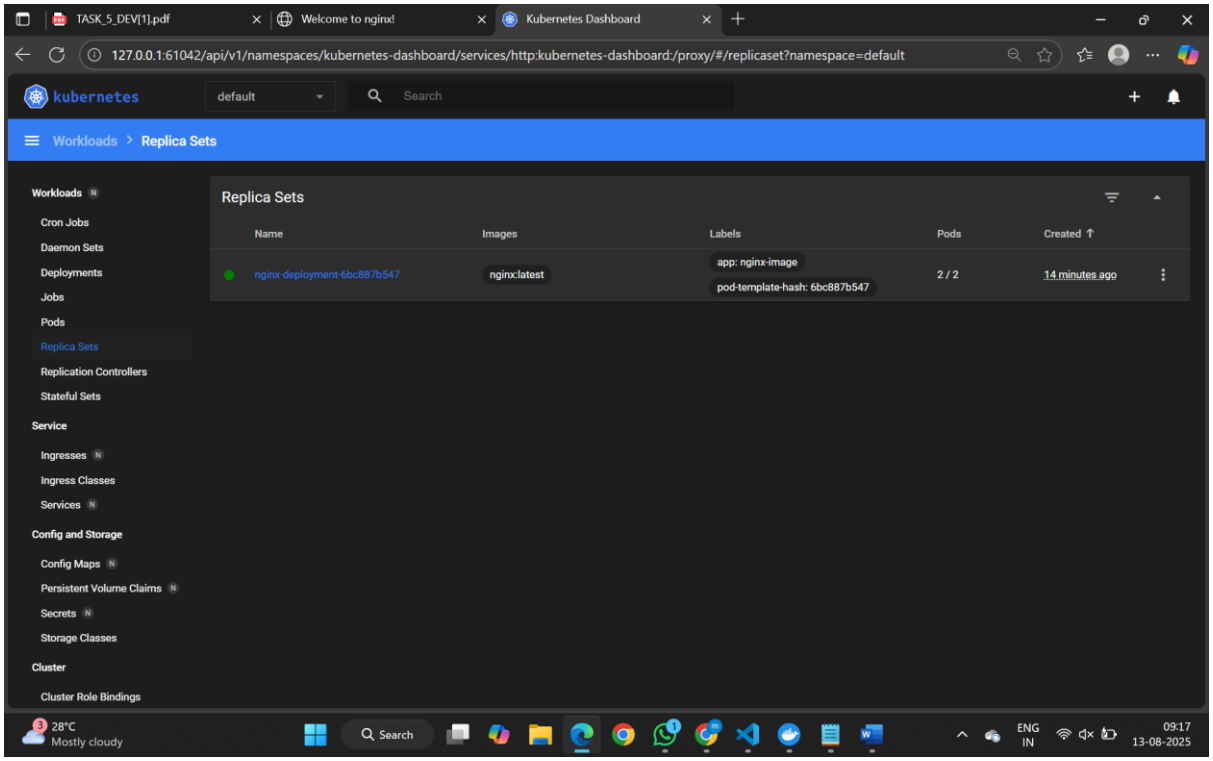
```
PS C:\Users\mansi\OneDrive\Desktop\Internship\Task-5> kubectl logs nginx-deployment-6bc887b547-4lqc7
/docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration
/docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
/docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf
10-listen-on-ipv6-by-default.sh: info: Enabled listen on IPv6 in /etc/nginx/conf.d/default.conf
/docker-entrypoint.sh: Sourcing /docker-entrypoint.d/15-local-resolvers.envsh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/20-envsubst-on-templates.sh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/30-tune-worker-processes.sh
/docker-entrypoint.sh: Configuration complete; ready for start up
2025/08/13 03:32:49 [notice] 1#1: using the "epoll" event method
2025/08/13 03:32:49 [notice] 1#1: nginx/1.29.0
2025/08/13 03:32:49 [notice] 1#1: built by gcc 12.2.0 (Debian 12.2.0-14+deb12u1)
2025/08/13 03:32:49 [notice] 1#1: OS: Linux 6.6.87.2-microsoft-standard-WSL2
2025/08/13 03:32:49 [notice] 1#1: getrlimit(RLIMIT_NOFILE): 1048576:1048576
2025/08/13 03:32:49 [notice] 1#1: start worker processes
2025/08/13 03:32:49 [notice] 1#1: start worker process 29
2025/08/13 03:32:49 [notice] 1#1: start worker process 30
2025/08/13 03:32:49 [notice] 1#1: start worker process 31
2025/08/13 03:32:49 [notice] 1#1: start worker process 32
2025/08/13 03:32:49 [notice] 1#1: start worker process 33
2025/08/13 03:32:49 [notice] 1#1: start worker process 34
2025/08/13 03:32:49 [notice] 1#1: start worker process 35
2025/08/13 03:32:49 [notice] 1#1: start worker process 36
2025/08/13 03:32:49 [notice] 1#1: start worker process 37
2025/08/13 03:32:49 [notice] 1#1: start worker process 38
2025/08/13 03:32:49 [notice] 1#1: start worker process 39
2025/08/13 03:32:49 [notice] 1#1: start worker process 40
10.244.0.1 - - [13/Aug/2025:03:36:19 +0000] "GET / HTTP/1.1" 200 615 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537
.36 (KHTML, like Gecko) Chrome/139.0.0.0 Safari/537.36 Edg/139.0.0.0" "-"
2025/08/13 03:36:19 [error] 29#29: *1 open() "/usr/share/nginx/html/favicon.ico" failed (2: No such file or directory), client: 10.
244.0.1, server: localhost, request: "GET /favicon.ico HTTP/1.1", host: "127.0.0.1:60959", referrer: "http://127.0.0.1:60959/"
10.244.0.1 - - [13/Aug/2025:03:36:19 +0000] "GET /favicon.ico HTTP/1.1" 404 555 "http://127.0.0.1:60959/" "Mozilla/5.0 (Windows NT
10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/139.0.0.0 Safari/537.36 Edg/139.0.0.0" "-"
```

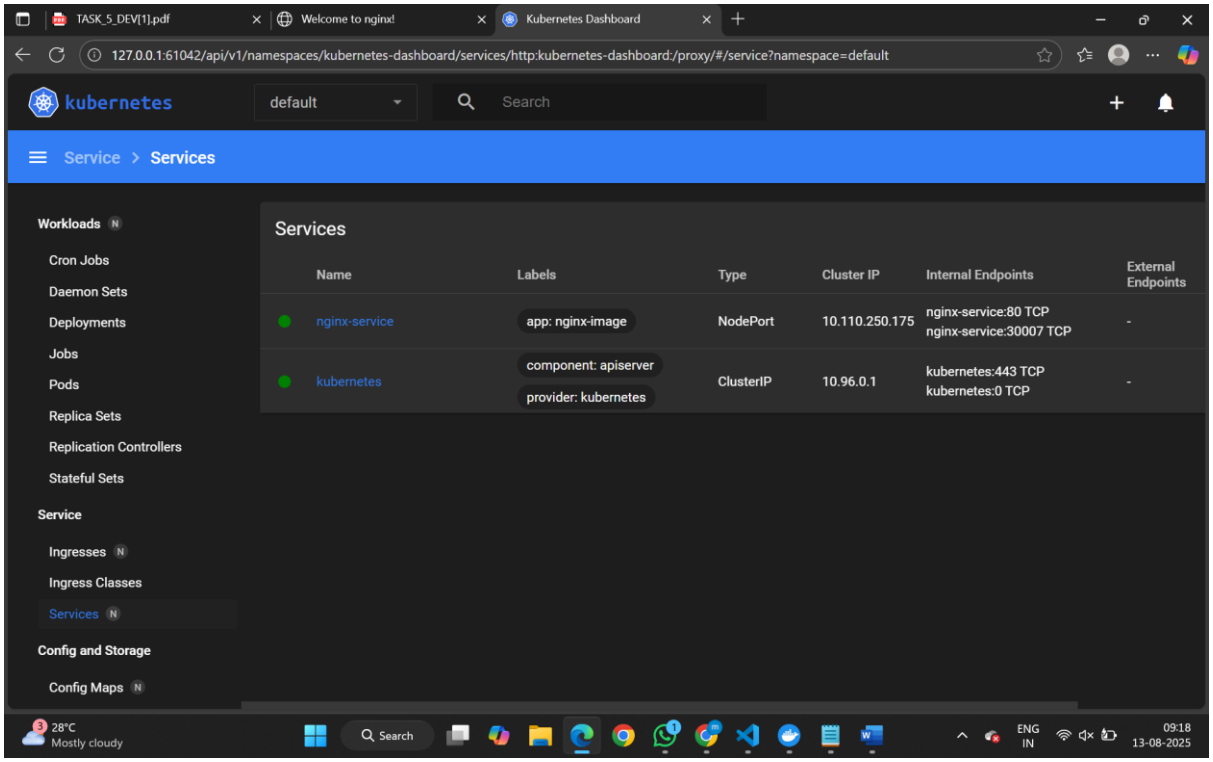
```
PS C:\Users\mansi\OneDrive\Desktop\Internship\Task-5> minikube dashboard
🤔  Verifying dashboard health ...
🚀  Launching proxy ...
🤔  Verifying proxy health ...
🎉  Opening http://127.0.0.1:61042/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/ in your defaul
t browser...
```




TASK_5_DEV[1].pdf
Welcome to nginx!
Kubernetes Dashboard
127.0.0.1:61042/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/#/deployment?namespace=default
kubernetes
default
Search
Workloads > Deployments
Workloads
Cron Jobs
Daemon Sets
Deployments
Jobs
Pods
Replica Sets
Replication Controllers
Stateful Sets
Service
Ingresses
Ingress Classes
Services
Config and Storage
Config Maps
Persistent Volume Claims
Secrets
Storage Classes
Cluster
Cluster Role Bindings
Deployments
Name
Images
Labels
Pods
Created
nginx-deployment
nginx:latest
app: nginx-image
2 / 2
14 minutes ago
28°C
Mostly cloudy
Search
ENG
IN
09:17
13-08-2025


TASK_5_DEV[1].pdf
Welcome to nginx!
Kubernetes Dashboard
127.0.0.1:61042/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/#/pod?namespace=default
kubernetes
default
Search
Workloads > Pods
Workloads
Cron Jobs
Daemon Sets
Deployments
Jobs
Pods
Replica Sets
Replication Controllers
Stateful Sets
Service
Ingresses
Ingress Classes
Services
Config and Storage
Config Maps
Persistent Volume Claims
Secrets
Storage Classes
Cluster
Cluster Role Bindings
Pods
Name
Images
Labels
Node
Status
Restarts
CPU Usage (cores)
Memory Usage (bytes)
Created
nginx-deployment-6bc887b547-4lqc7
nginx:latest
app: nginx-image
pod-template-hash: 6bc887b547
minikube
Running
0
-
-
14 minutes ago
nginx-deployment-6bc887b547-xxj9f
nginx:latest
app: nginx-image
pod-template-hash: 6bc887b547
minikube
Running
0
-
-
14 minutes ago
28°C
Mostly cloudy
Search
ENG
IN
09:17
13-08-2025


TASK_5_DEV[1].pdf
Welcome to nginx!
Kubernetes Dashboard
127.0.0.1:61042/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/#/replicaset?namespace=default
kubernetes
default
Search
Workloads > Replica Sets
Workloads
Cron Jobs
Daemon Sets
Deployments
Jobs
Pods
Replica Sets
Replication Controllers
Stateful Sets
Service
Ingresses
Ingress Classes
Services
Config and Storage
Config Maps
Persistent Volume Claims
Secrets
Storage Classes
Cluster
Cluster Role Bindings
Replica Sets
Name
Images
Labels
Pods
Created
nginx-deployment-6bc887b547
nginx:latest
app: nginx-image
pod-template-hash: 6bc887b547
2 / 2
14 minutes ago
28°C
Mostly cloudy
Search
ENG
IN
09:17
13-08-2025


TASK_5_DEV[1].pdf
Welcome to nginx!
Kubernetes Dashboard
127.0.0.1:61042/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/#/service?namespace=default
kubernetes
default
Search
Service > Services
Workloads
Cron Jobs
Daemon Sets
Deployments
Jobs
Pods
Replica Sets
Replication Controllers
Stateful Sets
Service
Ingresses
Ingress Classes
Services
Config and Storage
Config Maps
Services
Name
Labels
Type
Cluster IP
Internal Endpoints
External Endpoints
nginx-service
app: nginx-image
NodePort
10.110.250.175
nginx-service:80 TCP
nginx-service:30007 TCP
kubernetes
component: apiserver
provider: kubernetes
ClusterIP
10.96.0.1
kubernetes:443 TCP
kubernetes:0 TCP
28°C
Mostly cloudy
Search
ENG
IN
09:18
13-08-2025