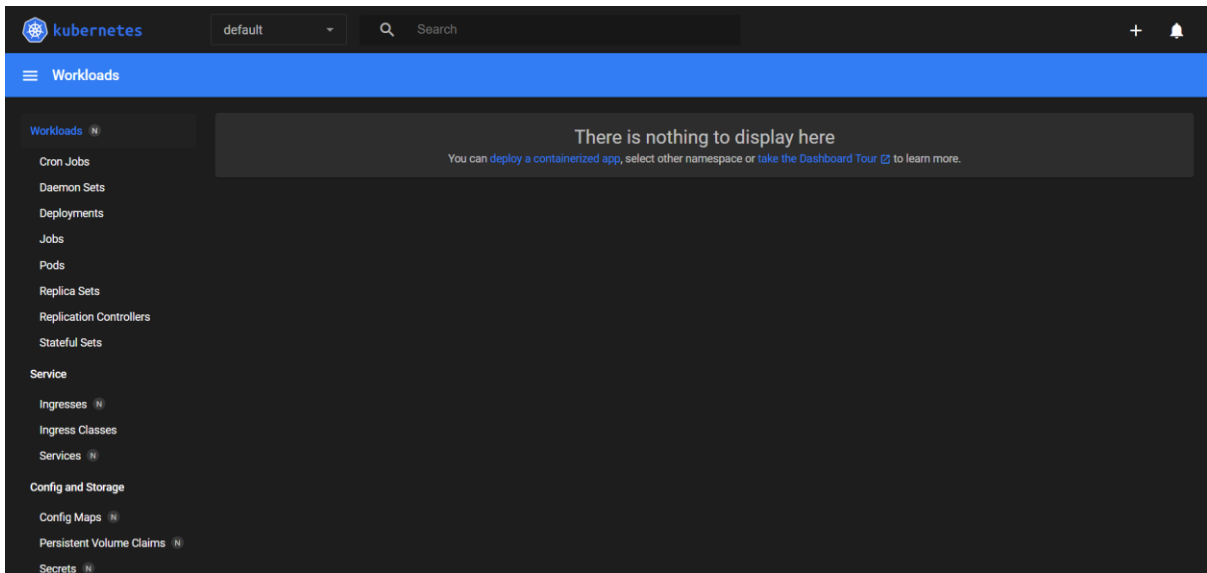# TASK 3 MINIKUBE

```
sushmithav@Sushmithav:~$ minikube version
minikube version: v1.35.0
commit: dd5d320e41b5451cdf3c01891bc4e13d189586ed-dirty
```

```
sushmithav@Sushmithav:~$ minikube dashboard
🤔  Verifying dashboard health ...
🚀  Launching proxy ...
🤔  Verifying proxy health ...
🎉  Opening http://127.0.0.1:46451/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/ in your default browser...
👉  http://127.0.0.1:46451/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/
```



```
sushmithav@Sushmithav:~$ mkdir my-docker-project
mkdir: cannot create directory 'my-docker-project': File exists
sushmithav@Sushmithav:~$ mkdir my-docker-app
mkdir: cannot create directory 'my-docker-app': File exists
sushmithav@Sushmithav:~$ mkdir my-dockers-project
sushmithav@Sushmithav:~$ cd my-dockers-project
sushmithav@Sushmithav:~/my-dockers-project$ touch Docker file
sushmithav@Sushmithav:~/my-dockers-project$ nano Dockerfile
sushmithav@Sushmithav:~/my-dockers-project$ npm init -y
Wrote to \\wsl.localhost\Ubuntu\home\sushmithav\my-dockers-project\package.json:

{
  "name": "my-dockers-project",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [],
  "author": "",
  "license": "ISC"
}


sushmithav@Sushmithav:~/my-dockers-project$ docker pull sushmithasuse/docker:latest
latest: Pulling from sushmithasuse/docker
Digest: sha256:0c85a8d9144c6eae02f61098e9e7edd227ccac7c4d7d9add4aebb3456c7b014a
Status: Image is up to date for sushmithasuse/docker:latest
docker.io/sushmithasuse/docker:latest
```

TASK 3 MINIKUBE


```
sushmithav@Sushmithav:~/my-dockers-project$ docker build -t sushmithasuse/docker:latest
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
            Install the buildx component to build images with BuildKit:
            https://docs.docker.com/go/buildx/

"docker build" requires exactly 1 argument.
See 'docker build --help'.

Usage:  docker build [OPTIONS] PATH | URL | -

Build an image from a Dockerfile
sushmithav@Sushmithav:~/my-dockers-project$ docker build -t sushmithasuse/docker:latest .
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
            Install the buildx component to build images with BuildKit:
            https://docs.docker.com/go/buildx/

Sending build context to Docker daemon  4.096kB
Step 1/7 : FROM node:18
18: Pulling from library/node
7cd785773db4: Pull complete
091eb8249475: Pull complete
255774e0027b: Pull complete
353e14e5cc47: Pull complete
aee83dd4a388: Pull complete
372d60850963: Pull complete
ec629d786f9c: Pull complete
a0e501ed6714: Pull complete
Digest: sha256:7f6bcd8e08a1f81bfbb29f5948de5c5507624788ddb50cadb94ddd439426b7c4
Status: Downloaded newer image for node:18
 ---> 5878ad25ae5e
Step 2/7 : WORKDIR /app
 ---> Running in ba0794bbbdcc
 ---> Removed intermediate container ba0794bbbdcc
 ---> 216fefb54bc1
Step 3/7 : COPY package.json ./
 ---> df042771100a
Step 4/7 : RUN npm install
 ---> Running in 1eab8090ea0e
```



```
found 0 vulnerabilities
 ---> Removed intermediate container 1eab8090ea0e
 ---> 728b57af5572
Step 5/7 : COPY . .
 ---> f77e97543179
Step 6/7 : EXPOSE 3000
 ---> Running in bf3b2c235b7d
 ---> Removed intermediate container bf3b2c235b7d
 ---> 45d10d10b51e
Step 7/7 : CMD ["npm", "start"]
 ---> Running in cb4082fa6cbd
 ---> Removed intermediate container cb4082fa6cbd
 ---> d1fae5513798
Successfully built d1fae5513798
Successfully tagged sushmithasuse/docker:latest
sushmithav@Sushmithav:~/my-dockers-project$ cd ..
sushmithav@Sushmithav:~$ minikube start
😄  minikube v1.35.0 on Ubuntu 24.04 (amd64)
✨  Using the docker driver based on existing profile
👍  Starting "minikube" primary control-plane node in "minikube" cluster
🚜  Pulling base image v0.0.46 ...
🏃  Updating the running docker "minikube" container ...
🐳  Preparing Kubernetes v1.32.0 on Docker 27.4.1 ...
🔎  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, dashboard, default-storageclass
🏄  Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
sushmithav@Sushmithav:~$ sudo nano nginx-delpoyment.yaml
[sudo] password for sushmithav:
sushmithav@Sushmithav:~$ sudo nano service.yaml
sushmithav@Sushmithav:~$
```

TASK 3 MINIKUBE

```
sushmithav@Sushmithav: ~$ kubectl apply -f nginx-deployment.yaml
deployment.apps/my-app created
sushmithav@Sushmithav: ~$ kubectl apply -f service.yaml
service/my-app created
sushmithav@Sushmithav: ~$ kubectl get pods
NAME                    READY   STATUS              RESTARTS   AGE
my-app-bdd964c46-hnbrf  0/1     ContainerCreating   0          26s
sushmithav@Sushmithav: ~$ kubectl get svc my-app
NAME     TYPE       CLUSTER-IP      EXTERNAL-IP   PORT(S)        AGE
my-app   NodePort   10.109.95.234   <none>        80:30391/TCP   25s
sushmithav@Sushmithav: ~$ minikube service my-app --url
http://127.0.0.1:40295
!   Because you are using a Docker driver on linux, the terminal needs to be open to run it.
^Csushmithav@Sushmithav: ~$ curl http://127.0.0.1:40295
curl: (7) Failed to connect to 127.0.0.1 port 40295 after 0 ms: Couldn't connect to server
sushmithav@Sushmithav: ~$ minikube status
minikube
type: Control Plane
host: Running
kubelet: Running
apiserver: Running
kubeconfig: Configured

sushmithav@Sushmithav: ~$ curl http://127.0.0.1:40295:80
curl: (3) URL rejected: Port number was not a decimal number between 0 and 65535
sushmithav@Sushmithav: ~$ kubectl get services
NAME         TYPE        CLUSTER-IP      EXTERNAL-IP   PORT(S)        AGE
kubernetes   ClusterIP   10.96.0.1       <none>        443/TCP        25m
my-app       NodePort    10.109.95.234   <none>        80:30391/TCP   2m21s
sushmithav@Sushmithav: ~$ kubectl port-forward delpoyment/my-app 10003:80
error: the server doesn't have a resource type "delpoyment"
sushmithav@Sushmithav: ~$ kubectl port-forward delpoyment/my-app 30004:80
error: the server doesn't have a resource type "delpoyment"
sushmithav@Sushmithav: ~$ kubectl port-forward delpoyment/my-app 30001:30
error: the server doesn't have a resource type "delpoyment"
sushmithav@Sushmithav: ~$ kubectl get deployments
NAME     READY   UP-TO-DATE   AVAILABLE   AGE
my-app   1/1     1            1           3m50s
```

```
sushmithav@Sushmithav:~$ kubectl port-forward deployment/my-app 30001:80
Forwarding from 127.0.0.1:30001 -> 80
Forwarding from [::1]:30001 -> 80
Handling connection for 30001
Handling connection for 30001
Handling connection for 30001
```

```
sushmithav@Sushmithav: ~$ minikube service my-app
|-----------|--------|--------------|---------------------------|
| NAMESPACE |  NAME  | TARGET PORT  |            URL            |
|-----------|--------|--------------|---------------------------|
|  default  | my-app |           80 | http://192.168.49.2:30391 |
|-----------|--------|--------------|---------------------------|
🏃  Starting tunnel for service my-app.
|-----------|--------|--------------|------------------------|
| NAMESPACE |  NAME  | TARGET PORT  |           URL          |
|-----------|--------|--------------|------------------------|
|  default  | my-app |              | http://127.0.0.1:33671 |
|-----------|--------|--------------|------------------------|
🎉  Opening service default/my-app in default browser...
👉  http://127.0.0.1:33671
!   Because you are using a Docker driver on linux, the terminal needs to be open to run it.
```

```
sushmithav@Sushmithav:~$ curl http://127.0.0.1:30001
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Jenkins Docker Test</title>
</head>
<body>
    <h1>Hello from Docker with Jenkins!</h1>
</body>
</html>
```

localhost:30001

Hello from Docker with Jenkins!

TASK 3 MINIKUBE