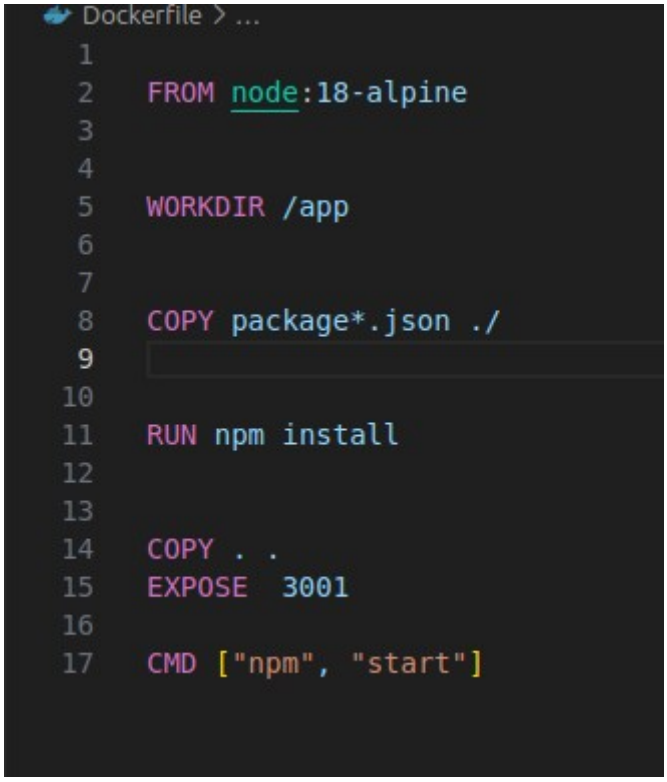
PROGRAM – 3

Project Structure:

1. Dockerfile
2. Server.js
3. package.json
4. node_modules

Dockerfile:



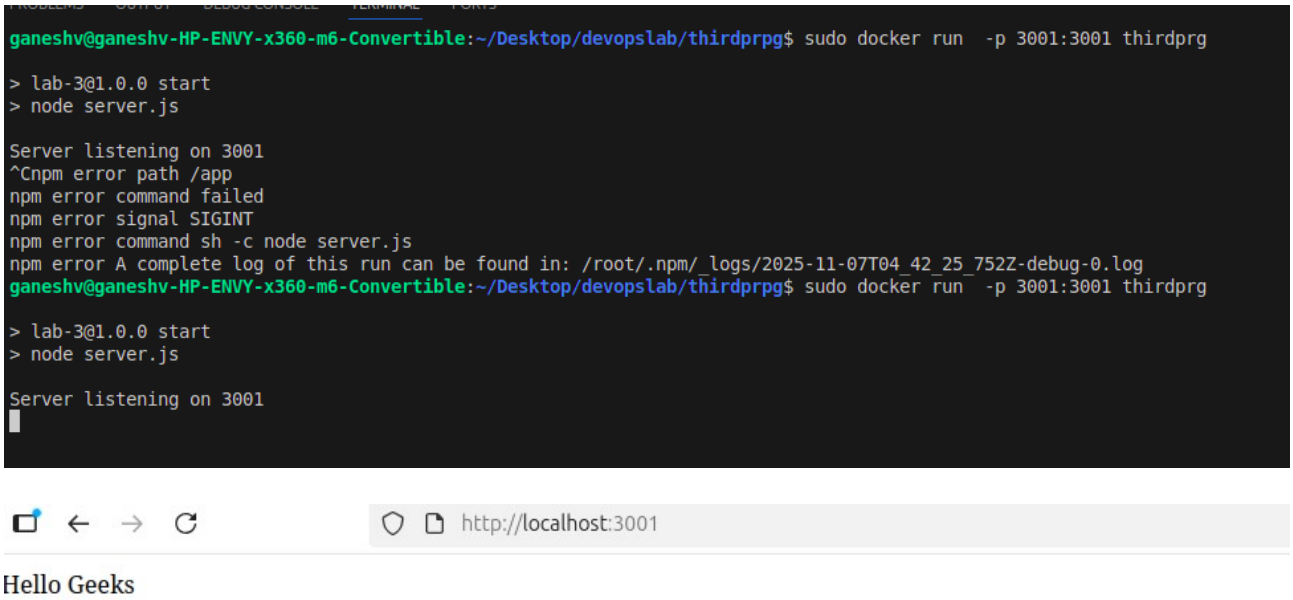
Server.js

To run the dockerfile:

# T build the image
sudo docker build -t thirdprg

# To run the image
sudo docker run -d -p 3001:3001 thirdprg

OUTPUT:



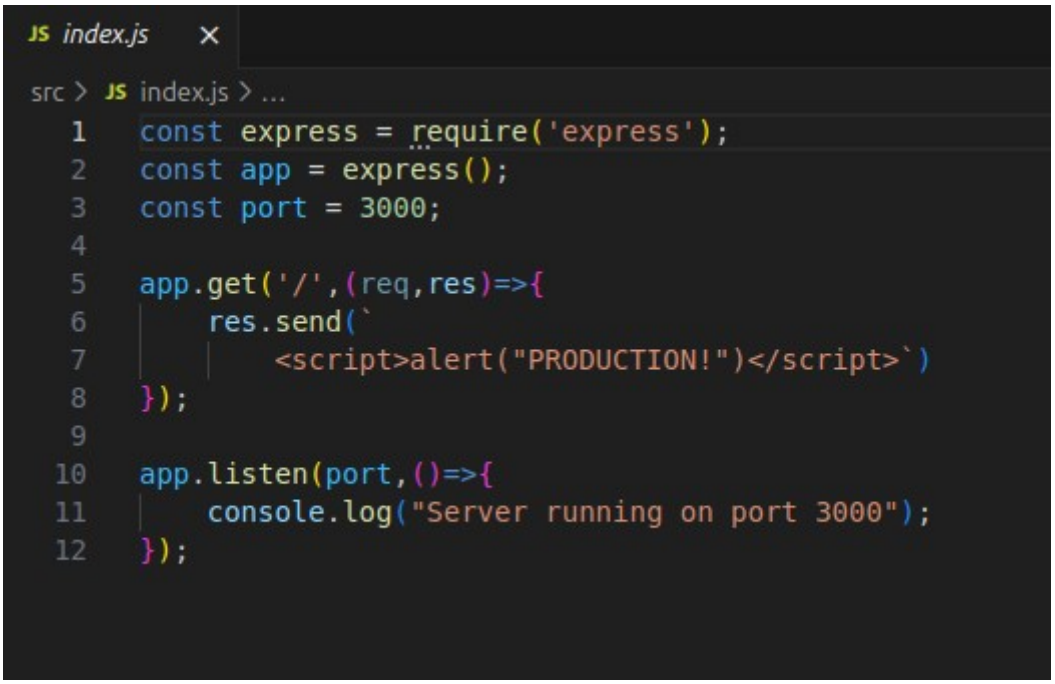
Hello Geeks

PROGRAM -2

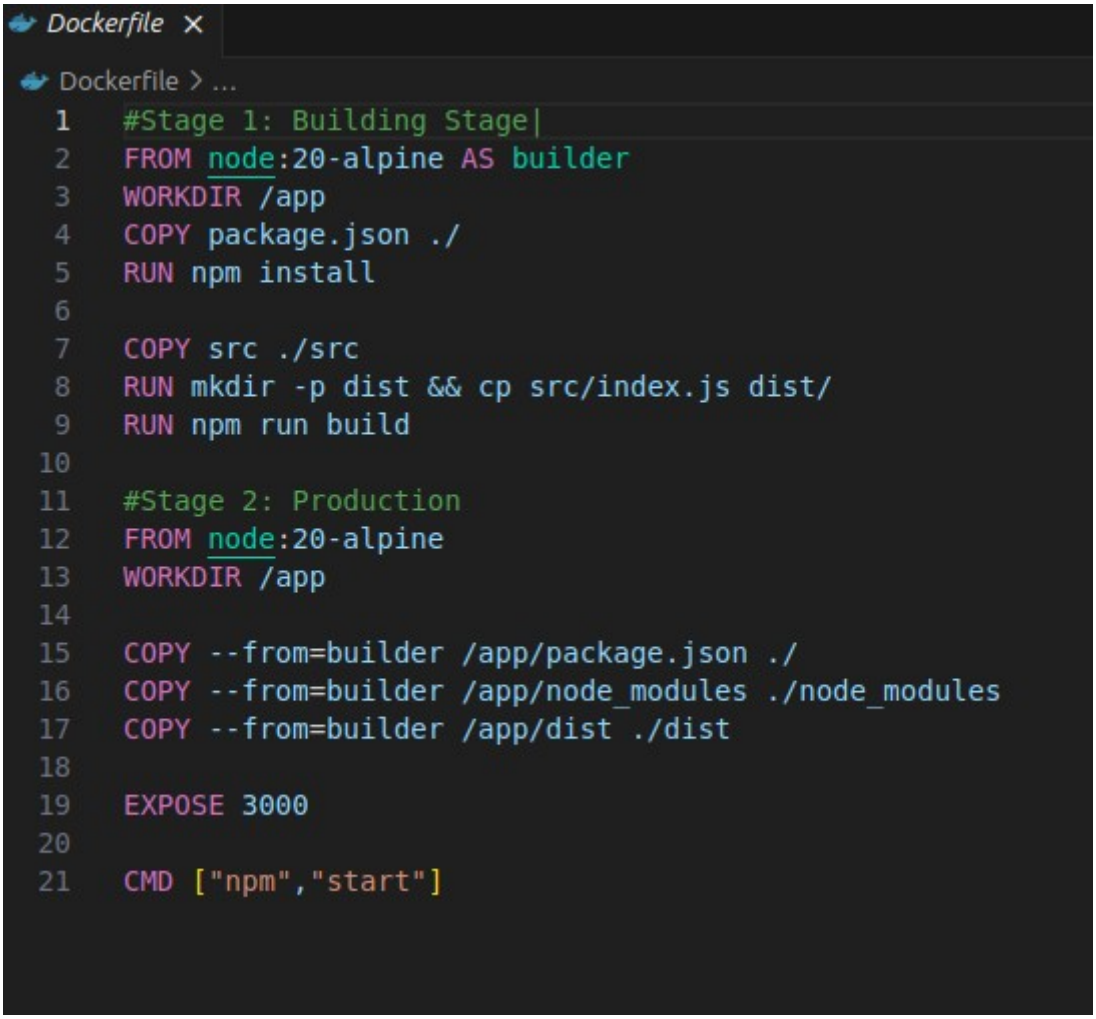
Project Structure:

1. node_modules
2. package.json
3. package_lock.json
4. src
   -index.js
5. Dockerfile

index,js



Dockerfile



To run the dockerfile:

# T build the image
sudo docker build -t secondprg

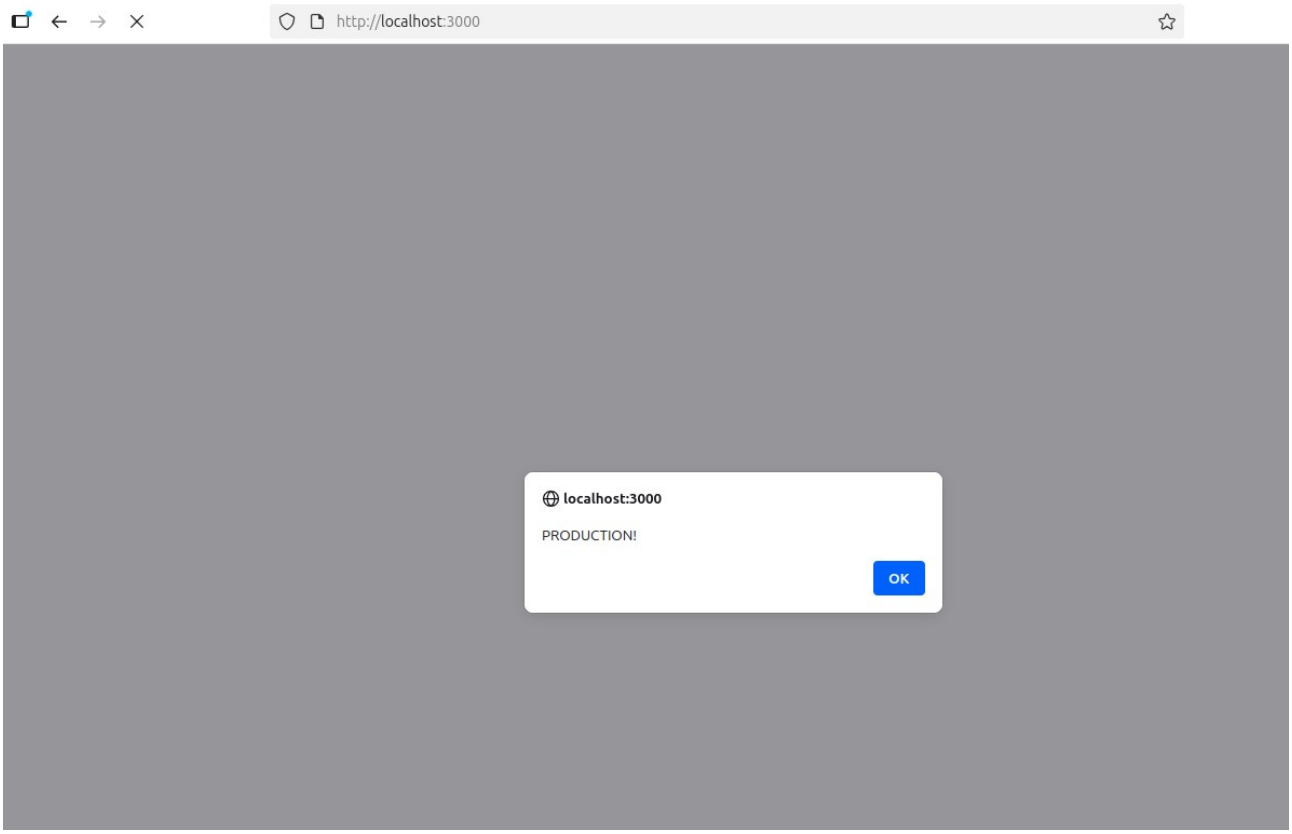
# To run the image
sudo docker run -d -p 3000:3000 secondprg

OUTPUT:

```
ganeshv@ganeshv-HP-ENVY-x360-m6-Convertible:~/Desktop/devopslab/secondprogram$ sudo docker build -t secprg .
 => CACHED [builder 3/7] COPY package.json ./
 => CACHED [builder 4/7] RUN npm install
 => CACHED [builder 5/7] COPY src ./src
 => CACHED [builder 6/7] RUN mkdir -p dist && cp src/index.js dist/
 => CACHED [builder 7/7] RUN npm run build
 => CACHED [stage-1 3/5] COPY --from=builder /app/package.json ./
 => CACHED [stage-1 4/5] COPY --from=builder /app/node_modules ./node_modules
 => CACHED [stage-1 5/5] COPY --from=builder /app/dist ./dist
 => exporting to image
 => => exporting layers
 => => writing image sha256:e8ab6280169cfb0c67e4db237279e5d520c702dc5be9c85fa7f10df42c03e6f0
 => => naming to docker.io/library/secprg
ganeshv@ganeshv-HP-ENVY-x360-m6-Convertible:~/Desktop/devopslab/secondprogram$  sudo docker run  -p 3000:3000 secprg

> second@1.0.0 start
> node dist/index.js

Server running on port 3000
```

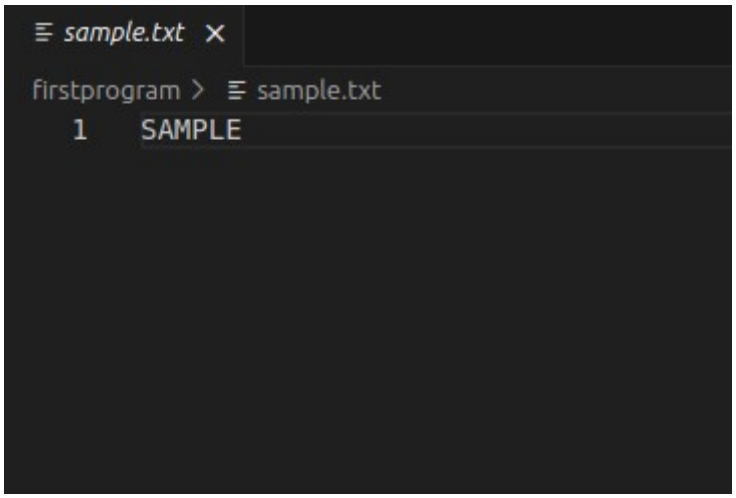


PROGRAM-1

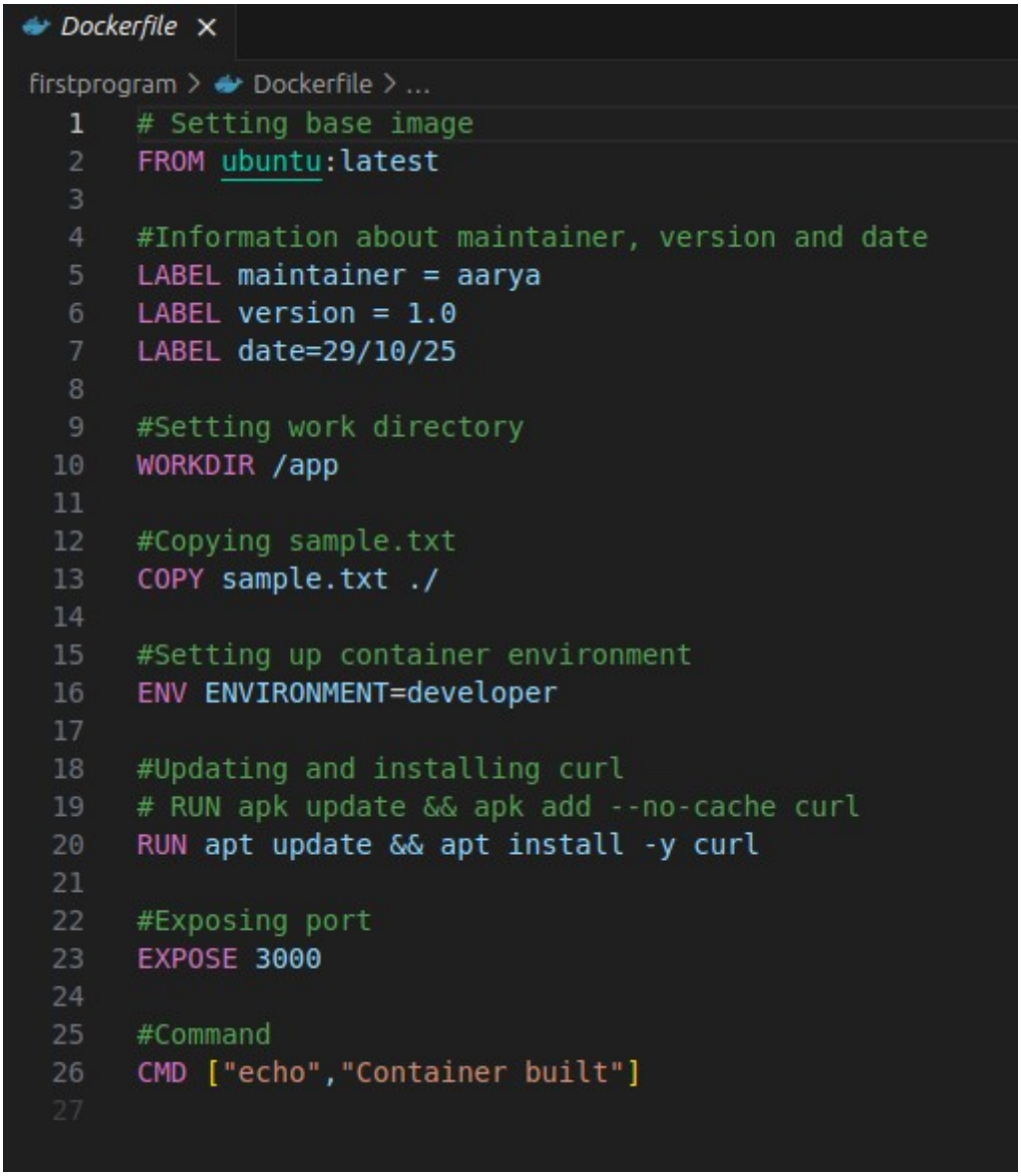
Project Structure:

1. sample.txt
2. Dockerfile

Sample.txt



Dockerfile



To run the dockerfile:

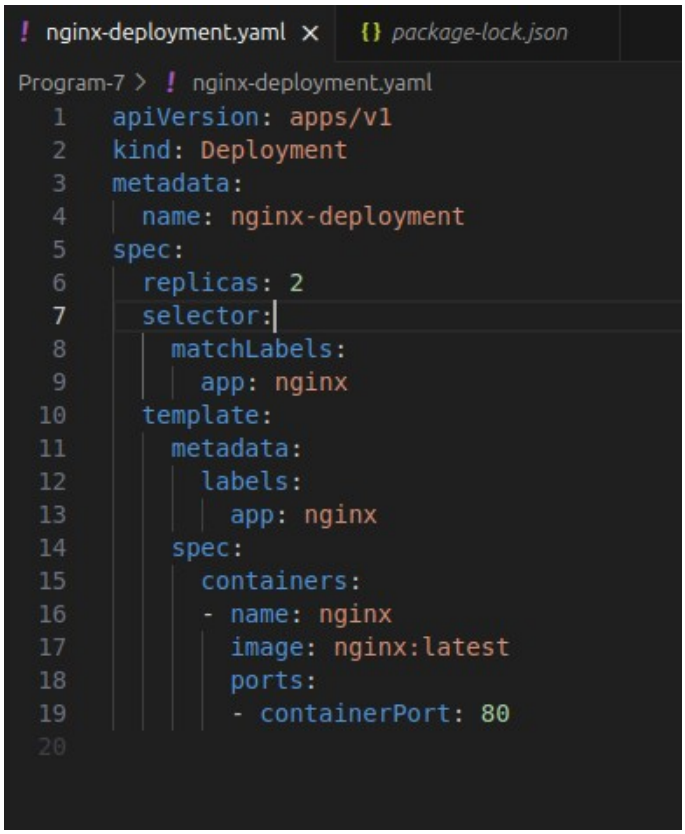
# T build the image
sudo docker build -t firstprg

# To run the image
sudo docker run -d -p 3000:3000 firstprg

PROGRAM-7

Project Structure:
1. nginx-deployment.yaml

nginx-deployment.yaml file



To run the .yaml file:

Applying deployment configuration to the cluster
kubectl apply -f nginx-deployment.yaml

Checking if the deployment was successful
kubectl get deployment

List all pods
kubectl get pods

Exposing the deployment as a service
kubectl expose deployment nginx-deployment –type=NodePort –port=80

list all services
kubectl get services

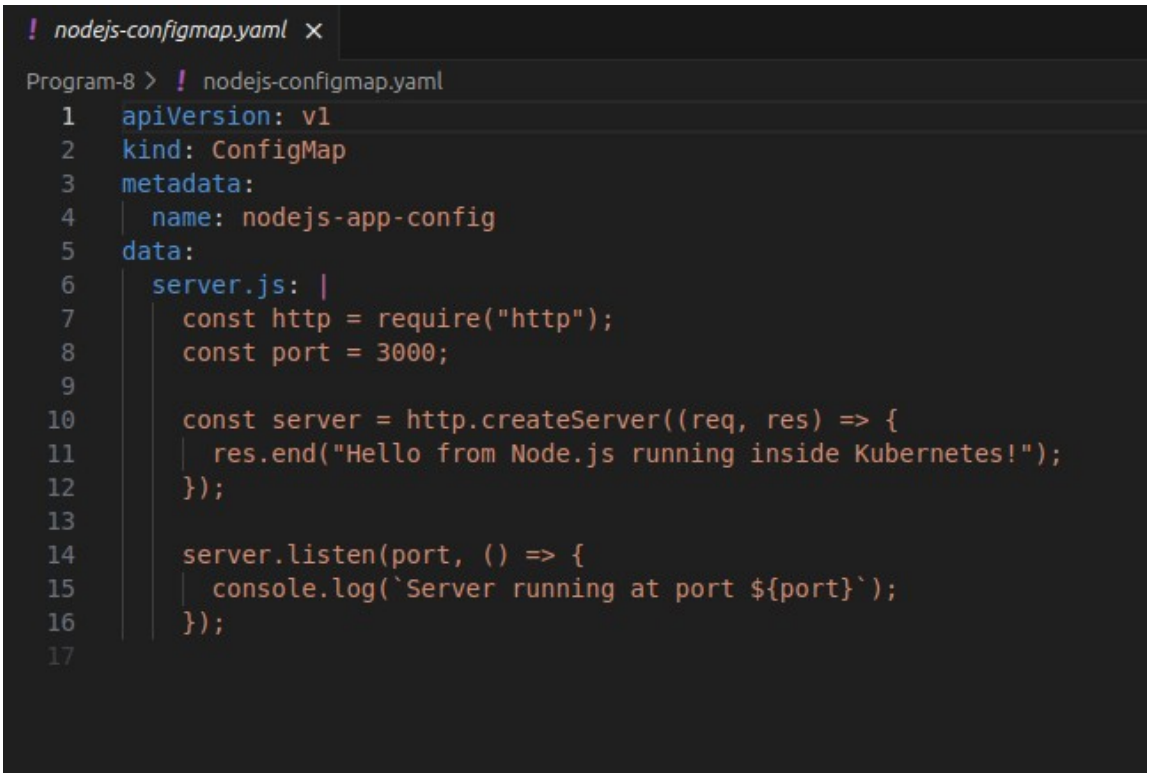
Accessing the exposed services
minikube service nginx deployment

PROGRSM-8

Project Structure:
1 server.js
2. nodejs-config.yaml
3, nodejs-pod.yaml

Server.js:

nodejs-config.yaml:



nodejs-pod.yaml

To run this program:

Deploy
kubectl apply -f nodejs-configmap.yaml
kubectl app -f nodejs-pod.yaml

list pods
kubectl get pods

expose
kubectl port-forward-pod/prog-8 3000:3000