TASK 3

**Step 1: Clone the Repository** git clone <your-repo-url> cd <your-repo-folder>

# Step 2: Build the Docker Image

docker build -t e-commerce-app .

**Step 3: Start Minikube** minikube start --force minikube status

# Step 4: Load the Docker Image into Minikube

minikube image load e-commerce-app Verify the image is loaded:

minikube image list # Ensure "e-commerce-app" is listed

**Step 5: Deploy the Application** kubectl apply -f deployment.yml kubectl get deployments

kubectl get pods

If you need a **NodePort service**, apply it: kubectl apply -f Nodeport.yaml

# Step 6: Fix Image Pull Issues (if necessary)

If Kubernetes tries to pull the image from a registry instead of using the local image, patch the deployment

kubectl patch deployment react-ecommerce-deployment --type='json' - p='[{"op": "replace", "path": "/spec/template/spec/containers/0/imagePullPolicy", "value": "Never"}]'

# Step 7: Expose the Service & Access the App

minikube ip

minikube service react-ecommerce-service

# Push to Git:

git init # If not already initialized

git add Dockerfile deployment.yml Nodeport.yaml

git commit -m "Kubernetes deployment for React e-commerce app" git remote add origin <your-repo-url>

git branch -M main

git push -u origin main





