**TASK 3**

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**Task**-kubernetes-Based E-Commerce Application :Develop and deploy a basic e-commerce application using Kubernetes. The project involves containerizing the application components. (tools: kubernetes, Docker)

**PROCEDURE  
  
1. Repository Setup**

* Clone the e-commerce repository.
* Navigate into the project folder.

**2. Docker Image Creation**

* Build a Docker image for the application.

**3. Minikube Initialization**

* Start Minikube and verify its status.

**4. Load Image into Minikube**

* Ensure the Docker image is available in Minikube.

**5. Application Deployment**

* Apply the Kubernetes deployment configuration.
* Verify deployments and running pods.

**6. NodePort Service (Optional)**

* Deploy a NodePort service for external access if required.

**7. Image Pull Policy Fix (If Needed)**

* Patch the deployment to use the local image instead of pulling from a registry.

**8. Manual Pod Deployment (If Required)**

* Run a pod manually and expose it as a service.

**9. Service Exposure & Application Access**

* Retrieve the Minikube IP.
* Expose the service and access the application.

**10. GitHub Integration**

* Initialize a Git repository.
* Commit and push deployment files to GitHub.

**OUTPUT SCREENSHORT**



