# Documentation - CrudTodo

Perquisite :- Docker and minikube should be installed on a LINUX system

Note:-

1. All the command are specific to a demo crud app (CrudTodo)
2. The app is containerized into 2 docker files:
   1. Dockerfile.backend (for flask)
   2. Docker.psql (for PostgreSQL)
3. The application is going to be deployed into 2 pods in different nodes

Step1: check if docker is running:

Run: docker images

If docker is not running:  
 Run: sudo service docker start

Step 2: check if minikube is running:

Run: minikube status

To start minikube:  
 Run: minikube start

Step 3: Activate minikube docker environment

Run: eval $(minikube -p minikube docker-env)

Step 4: setup kubectl

Run: alias kubectl=”minikube kubectl --”

Step 4: build docker images for both your docker files

Run: docker build -f Dockerfile.backend -t todo\_backend .

Run: docker build -f Dockerfile.psql -t todo\_psql .

Step 5: create kubernetes objects for postgres

Run: kubectl apply -f postgres-deployment.yaml

Run: kubectl apply -f postgres-service.yaml

Step 6: create kubernetes service objects

Run: kubectl apply -f backend-deployment.yaml

Run: kubectl apply -f backend-service.yaml

Step 7: get cluster IP

Run: kubectl get endpoints

Copy the endpoint IP of Kubernetes and run in port 30080

It should look like – <IP>:30080

Step 8: Open the URL in any browser inside your Linux to access the application