**Problem:-**Create a simple web-page hit counter web application using python or Golang. Whenever we open/hit the URL, it should return a “Wonderful.. We have hit <counter> times” and print on the web-page. You can make use of Redis or any Database for storing counter value.

Containerize all the web application related code and build the images using docker and run it on K8s.

Guidelines

In order to keep this exercise repeatable we have chosen minikube cluster and docker for building images. Selection of OS, configure management and software packages are up to you.

Required Tools:

-Minikube

-Docker

Solution :-

1. Create python application for Hit count

2. Use **Redis DB** for storing count

3. Create docker file for building image use above command

=>  **[Docker build -t hit-counter .]** :- This Command create Docker image in Docker Desktop

4. Create Docker-Compose File for configure docker image and containerize image in docker desktop

=> **[Docker-Compose -f docker-compose.yml up]** :-This Command build and containerize image on Docker Desktop

1. Push image to Docker hub

5.1 Firstly give **tag** to the image using This Command  **[Docker tag hit-counter-myapp kumaryeoley/hit-counter-myapp]**

5.2 **[Docker login -u "username" -p "password" docker.io]**  for log in into Dockerhub

5.3 **[Docker push kumaryeoley/hit-counter-myapp]** for pushing image to Dockerhub

6. Install Kubectl CLI and Minikube on system & on docker or VM (Preffer Docker) respectivlly

7. Create **deployment.yml , service.yml & create-pod.yml** file

8. Run This Command **[kubectl apply -f deployment.yml]** for deployment of application

9. Run This Command **[minikube dashboard]** for visualize minikube deployment dashboard

10. Run application on **localhost port number**