

Kubernetes Assignment 1

1. What is a Kubernetes cluster?

Ans: Kubernetes cluster is a set of nodes which are used to manage multiple containers.

2. What are the different parts of the Kubernetes architecture?

Ans: The different parts of the Kubernetes architecture are as follows:

- 1) User Interface (in docker desktop)/Comand line (kubect!)
- 2) Master Node (Control plane)
- 3) Worker Nodes

3. What exactly do you mean by "container orchestration"?

Ans: Container orchestration means managing multiple containers.

4. What are the various features of Kubernetes?

Ans: The various features of Kubernetes are:

- 1) Load balancing
- 2) Up/ Down scaling
- 3) Automatic updation of changes
- 4) Tracking the state of every node
- 5) Storage orchestration

5. Explain the relationship between Kubernetes and Docker?

Ans: Docker is useful for creating containers on the other hand Kubernetes is used to encapsulate multiple docker containers into pods which in turn is encapsulated into nodes called worker nodes which consists of the Docker (for container creation), kubelet and kube-proxy. Kubernetes also provides a master node which manages these docker container contained worker nodes.