Kubernetes Assignment 2

1. What is the importance of Load Balance in Kubernetes?

Ans: Load balancing technique is used to manage utilization of a server beyond its capacity. In such a scenario the extra load is passed on to another server.

2. What is the relationship between Kubernetes and Docker?

Ans: The relationship between Kubernetes and Docker can be thought as a parent and child relationship respectively. Docker is present in Kubernetes encapsulation called worker nodes which is used to create multiple containers in pods.

3. What distinguishes Kubernetes from other containers?

Ans: Kubernetes has extra abilities like managing nodes and pods, upscaling or downscaling the utilization of nodes while containers doesn't have such extra abilities they are just used to encapsulate the microservices.

4. What exactly do you mean when you say heapster?

Ans: Heapster enables Container Cluster Monitoring and Performance Analysis for Kubernetes (versions v1.0.6 and higher), and platforms which include it.

Heapster is a cluster-wide aggregator of monitoring and event data. It currently supports Kubernetes natively and works on all Kubernetes setups. Heapster runs as a pod in the cluster, similar to how any Kubernetes application would run. The Heapster pod discovers all nodes in the cluster and queries usage information from the nodes' Kubelets, the on-machine Kubernetes agent. The Kubelet itself fetches the data from cAdvisor. Heapster groups the information by pod along with the relevant labels. This data is then pushed to a configurable backend for storage and visualization.

5. What exactly is a kubelet?

Ans: Kubelet is an entity present inside worker nodes. It is called as node-agent as it manages the whole node also the creation, updation and deletion of containers and connection with the API servers.