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Advance DevOps lab

### Experiment 3

Aim -

To understand the Kubernetes Cluster Architecture, install and spin up a Kubernetes cluster on Linux machines/cloud platforms.

Theory -

Kubernetes is a software that automatically manages, scales and maintains multi-container workloads in desired states.

Modern software is increasingly run as fleets of containers called as microservices.

Features of Kubernetes:

- 1) Standard services like local DNS and basic load balancing that most applications need, and are easy to use.
- 2) Standard behaviors (restart container if it dies) that are easy to invoke and do most of the work to keep containers running, available and performant.
- 3) A standard API that applications can call to easily enable more sophisticated behaviors, making it much easier to create applications that manage other applications.

## Conclusion -

Thus we have successfully install and spin up a Kubernetes Cluster. on Linux / cloud machine.