Continuous Integration Continuous Deployment
CICD

- ***Continuous Integration* VS *Continuous Deployment***

- **Continuous Integration:**

  The practice of merging all developers' working copies to a shared mainline several times a day. It's the process of "Making". Everything related to the code fits here, and it all culminates in the ultimate goal of CI: a high quality, deployable artifact!

- **Continuous Deployment**

  A software engineering approach in which the value is delivered frequently through automated deployments. Everything related to deploying the artifact fits here. It's the process of "Moving" the artifact from the shelf to the spotlight

Benefits of CICD

- Less developer time on issues from new developer code

- Less bugs in production and less time in testing

- Prevent embarrassing or costly security holes

- Less human error, Faster deployments

- Less infrastructure costs from unused resources

- New value-generating features released more quickly

- Less time to market

- Reduced downtime from a deploy-related crash or major bug

- Quick undo to return production to working state