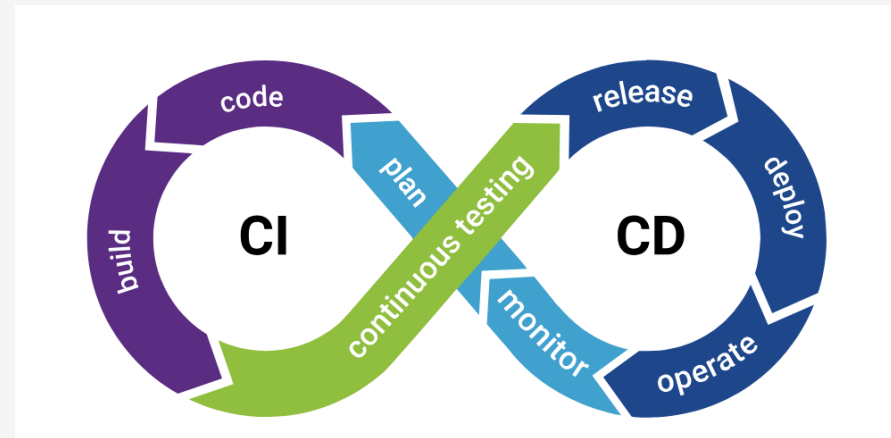# Benefits of using CI/CD

for automating build, deploy, delivery products

Why Use CICD?

Before CICD

almost stages in software industry require human intervention.

Apply CICD

can reduce human intervention, human error in stages of software industry

Continuous Delivery
Continuous Delivery = Continuous Integration + Continuous Deployment

Continuous Delivery:
- An engineering practice in which teams produce and release value in short cycles.

Continuous Integration
- The practice of merging all developers' working copies to a shared mainline several times a day. It's the process of "Making".
- If has to do with code, it has to do with CI

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 using CI/CD for business

Applying CICD will:

Reduce Cost:
- Less developer time on issues from new developer code by catching compile errors after merge
- Less infrastructure costs from unused resources by automating infrastructure cleanup

Avoid Cost:
- Less bugs in production and less time in testing by catching unit test failures
- Prevent embarrassing or costly security holes by detecting security vulnerabilities
- Less human error, Faster deployments by automating infrastructure creation

Benefits of using CI/CD for business

Applying CICD will:

Increase Revenue:
- New value-generating features released more quickly by deploying faster and more frequent production
- Less time to market by deploying to production without manual checks

Protect Revenue:
- Reduced downtime from a deploy-related crash or major bug by automating Smoke Tests
- Quick undo to return production to working state by automating rollback triggered by Job Failure