

## Experiment No :- 01

**Aim:-** To understand Devops:- principle practice and Devops Engineer role and responsibility

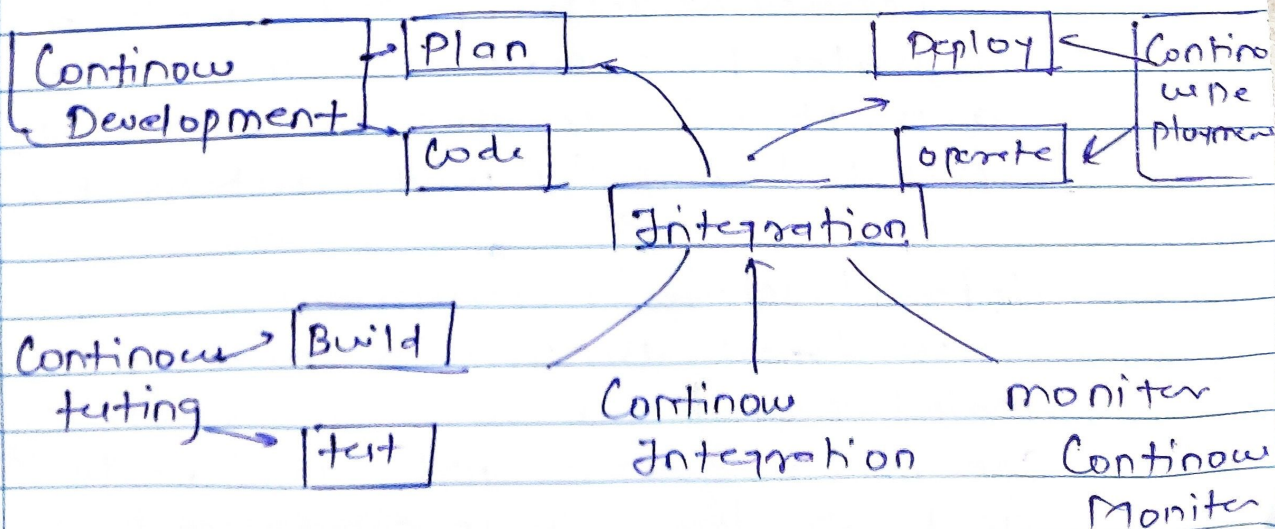
**What is Devops?**

Devops is a collaborative approach where team work together to build and deliver secure software efficiently. It combines software development (Dev) and operation (Ops) to devised how to accelerate delivery through automation, collaboration, fast feedback and iterative improvement.

**Core Principle:-**

1. Develop and test in productive-like environments.
2. Deploy builds frequently
3. Continuously validate operational quality.

**Devops practices .**





## Continuous Development |

This is the phase that involves planning and verseting and managing build of the software applications functionality.

Ex. Crt, Github, Maven etc

## Continuous testing!.

Continuous testing is executing automa-  
ted test and the various deployment  
environments

Ex. Bamboo appium.

## Continuous Integration!.

Continuous Integration refers to build  
and unit testing stages of the software  
refers process every revision that is  
committed triggers an automated build the  
test

## Continuous delivery & Deployment!.

Continuous delivery and deployment  
originates from continuous integration  
a method to develop build and test  
new code rapidly with automation

## Infrastructure management!.

without/automation building and  
maintaining large scale modern system  
can be a source intensive undertaking  
and can lead to increase risk to



to manual setup.

## Configuration Management:-

Infrastructure as a code is the inf practice of describing all software runtime environment and networking setting and parameter in simple textual formatting can be stored

## Cloud Based Devops:-

Devops automation is becoming cloud centric most public and private cloud computing providers support devops system atically on their platform including continuous integration and continuous development tools.

eg:- AWS, Amazon lamda,  
Google cloud etc.

## Devops engineer Roles.

A Devops engineer manages a company's infrastructure, development and operation. Key responsibilities including:-

- Technical responsibility

- iii) Build & maintain a/w pipelines
- iv) Sequence implementation & monitoring.

## Management Responsibility.

plan team structure & activity

Manage Stakeholder

Mentor team member

Coordinate team communication