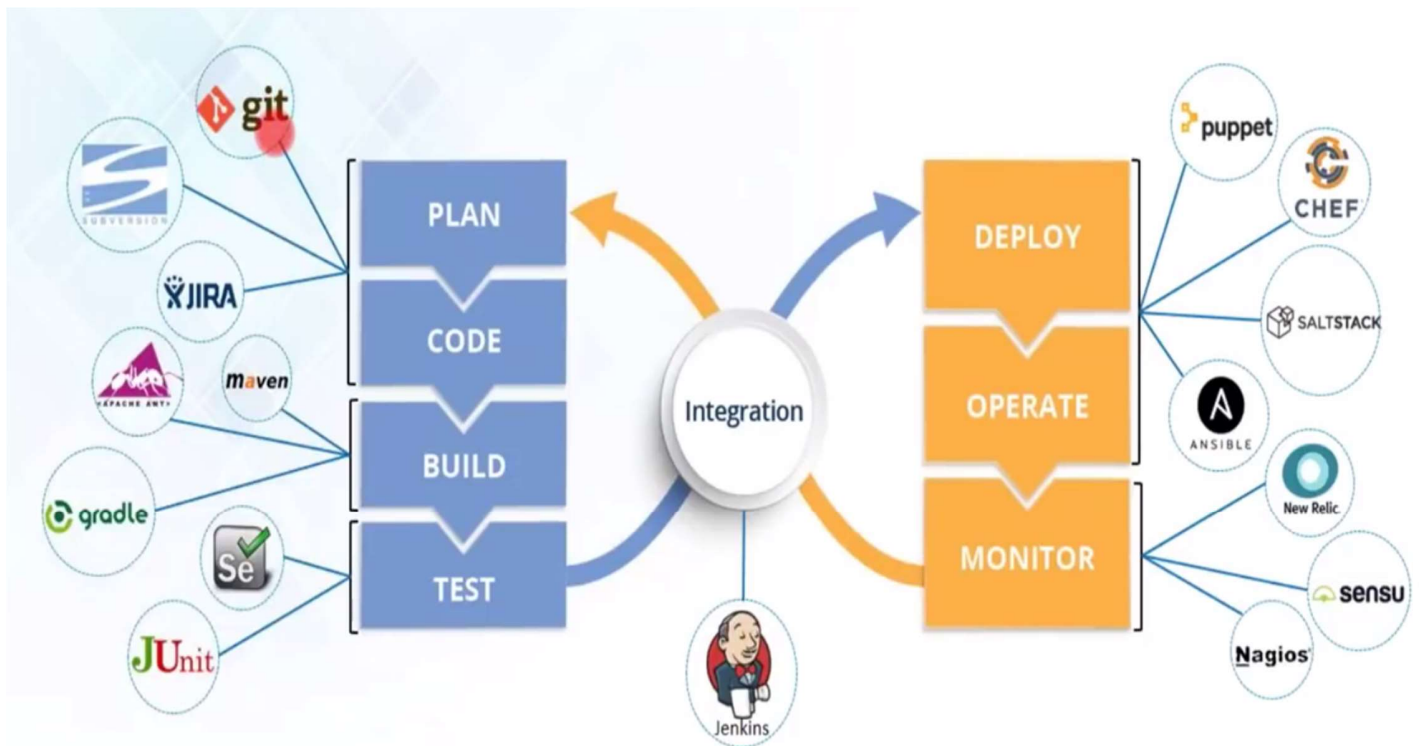
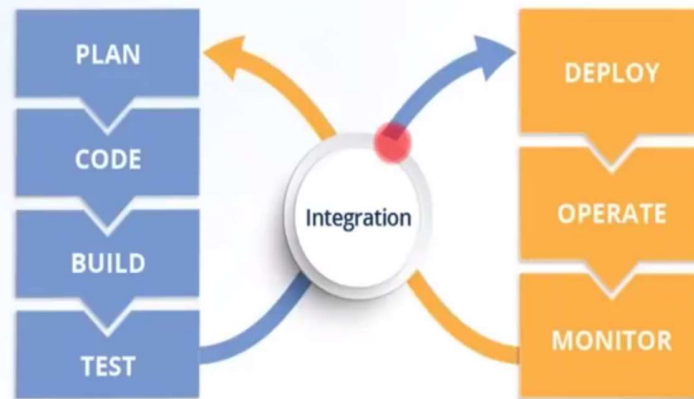
		Hope Foundation's Finolex Academy of Management and Technology, Ratnagiri	
		Information Technology Department	
Subject name: DevOps Lab			Subject Code:
Class	BE IT	Semester – VIII (CBCGS)	Academic year: 2019-20
Name of Student	Omkar Dattaraj Dali	QUIZ Score :10	
Roll No	10	Assignment/Experiment No.	01
Title: To Understand the concept of DevOps with related technologies			

1.Course objectives applicable COB3. COB6.
2. Course outcomes applicable: CO2 - CO6-
3. Learning Objectives: <ol style="list-style-type: none"> To understand concept of devops and its benifits To know the open source tools to achieve the benefits of DevOps culture
4. Practical applications of the assignment/experiment: To get the faster release of software and continuous feedback,its important to know the related technologies
5. Prerequisites: <ol style="list-style-type: none"> Knowledge of waterfall model in software development Internet Access Knowledge linux operating system
6. Hardware Requirements: <ol style="list-style-type: none"> Internet Access with Browser Access to root privilegees
7. Software Requirements: Browser like Chrome, Internet Explorer Edge
8. Quiz Questions (if any): (Online Exam will be taken separately batchwise, attach the certificate/ Marks obtained) <ol style="list-style-type: none"> What is DevOps ? What are the devops development life cycles? How the devops is different than agile technology?

9. Experiment/Assignment Evaluation:			
Sr. No.	Parameters	Marks obtained	Out of
1	Technical Understanding (Assessment may be done based on Q & A <u>or</u> any other relevant method.) Teacher should mention the other method used -		6
2	Neatness/presentation		2
3	Punctuality		2
Date of performance (DOP)		Total marks obtained	10
Date of checking (DOC)		Signature of teacher	

10.Theory-

DevOps is a Software Development approach which involves Continuous Development, Continuous Testing, Continuous Integration, Continuous Deployment and Continuous Monitoring of the software throughout its development lifecycle



Benefits of DevOps

Implementing a DevOps practice can add value to your organization through a number of benefits, including the following:

- Faster code delivery
- Faster time to market
- Higher-quality software
- Improved collaboration between developers and operations
- Decreased time to resolution for fixing bugs and vulnerabilities
- A culture that brings business, development, and operations together for improved responsiveness to market demands

DevOps tools

DevOps tools cover a range of processes within the software development life cycle:

- **Define and plan**, which focuses on planning DevOps workflows for iterations, release management, and issue tracking. Notable tools or tool vendors in this space include Atlassian, CA Technologies, IBM, iRise, and Jama Software.
- **Code, build, and configure**, which focuses on code development and review, source code management, and code merging. Notable tools/tool vendors include BitBucket, Electric Cloud, GitLab, GitHub, and IBM.
- **Test**, which verifies that the quality of the software release and code are maintained throughout the development process and that the highest quality deploys to production. Notable tools/tool vendors include Delphix, FlawCheck, HP, IBM, Microsoft, Parasoft, SonarSource, Skytap, and ThoughtWorks.
- *Packaging and preproduction*, which refers to the activities involved once the release is ready for deployment; it's also called staging or preproduction. Notable tools/tool vendors include IBM, Inedo's ProGet, Jfrog's Artifactory, Sonatype Nexus repository.
- **Release, deploy, and orchestration**, which is the process of actually releasing software and usually involves change management, release approvals, release automation, schedule orchestration, provisioning, and deploying into production. Tools/tool vendors in this space include Automatic, Clarive, BMC, IBM, Flexagon, VMware, and XebiaLabs.
- *Continuous management and configuration* includes continuous configuration automation, configuration management, and infrastructure as code. Notable tools/tool vendors include Ansible, Chef, IBM, Puppet Labs, Otter, and Salt.
- *Monitoring* reports application performance and helps identify issues impacting the user experience. Tools/tool vendors include Big Panda, IBM, New Relic, Plumb, and Wireshark.

References :

IBM DevOps: Shorten releases, improve reliability, and stay ahead of the competition

- Read the eBook, [DevOps for Dummies](#)
- [Try IBM UrbanCode Velocity](#) free for 60 days