

## ASSIGNMENT-2

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Date : 4th March 22

Ques-1. Why is DevOps is major requirement  
in today's scenario?

Ans-2. DevOps is needed because it fills the gaps within an organization.

DevOps unifies two different environments - Development and Operations, to develop a qualitative and secure application. A visible trend shows that the demand for devOps is increasing with the dire need for continuous product delivery.

Today's business has part of software business in it, this is the reason why DevOps is getting famous day by day and quickly becoming a part and parcel of every business using IT or software in it. Main focus of DevOps is to improve the quality, speed and deliverability of a software in a complete SDLC.

Ques-2. Explain all the DevOps tools in details.

Ans-2. DevOps tools are:-

(i) Puppet: It allows the delivery and release of the technology changes quickly and frequently. It has a feature of versioning, automated testing and continuous delivery. It enable to manage entire infrastructure as code without expanding the size of the team.

(ii) Ansible: Ansible is an open source IT engine that automates application deployment, cloud provisioning, intra service orchestration, and other IT tools. It makes it easier for DevOps to scale automation and speed up productivity.

This tool is easy to deploy because it does not use any agents or custom security infrastructure on the client side, and by pushing modules to the clients. These modules are executed locally on the client-side, and the output is pushed back to the Ansible server.

(iii) Docker: Docker is a high-end DevOps tool that allows building, ship and run distributed applications on multiple system. It also helps to assemble the apps quickly from the components, and it is typically suitable for container management.



(iv) Nagios : It can determine the errors and rectify them with the help of network, infrastructure, server and log monitoring systems.

(v) Jenkins : Jenkins is a DevOps tool for monitoring the execution of repeated tasks. Jenkins is a software that allows continuous integration. Jenkins will be installed on a server where the central build will take place. It helps to integrate project changes more efficiently by finding the issue quickly.

(vi) Git : Git is an open source distributed version control system that is freely available for everyone. It is designed to handle minor to major projects with speed and efficiency. The version control allows you to track and work together with your team members at the same workspace.