# Introduction DevOps

AWS

Dev+Ops = DevOps

Facebook ---> Developer --> requirements

Developer --> Code

AWS --> Server's(Ec2) - S3 Bucket's - VPC(Networking) - Load Balancer() - RDS(MySQL, ARORA, Post, Mongo)

AWS --> DevOps

AWS -- 80%, GCP - 5%, Azure--15%

**DevOps Tools:)**

**Git, GitHub,BitBucket.**

**SonarQube -- Code Quality**

**Jenkins -- CI-CD**

**Maven -- Building Tool**

**Nexus -- Artifactory Repository**

**Ansible -- Configuration management**

**Docker -- Containerization**

**Kubernetes -- Containerization Orchestration --> Grafana, Helm Charts, Prometheus, ELK Stack.**

**Terraform -- Infrastructure as a code**

AWS Tomcat --

Kubernetes -- Grafana, Helm Charts, Prometheus, ELK Stack.

AWS --> Amazon Web Services

What is AWS?

AWS is a flatform that provides on-demand resources for hosting web services, storage, Networking, database and other resources over the internet with a pay as you go pricing.

What are the components of AWS?

Ec2(Elastic compute Cloude), S3(Simple Storage Services), Route53,EBS - Elastic Block Storage, Cloud Watch, RDS These are the components.

On-premises:

In the past The organization’s are used to build and maintain their own data centers to store their data and run their application.

**we use AWS cloud because it is cost-efficient, secure, and flexible ,we can save.**

Organizational Environment­:-

**Development, QA, UAT, Production.**

**Devops language:-**

Shell Scripting

python

AMI --> Amazon Machine Image

VPC --> Virtual Private Cloud

Subnet --> A subnet is a range of IP addresses in your VPC

Use Security groups and security group rules as a firewall to control traffic form your ec2 instances.

sudo su – Root user

**yum install** git -y = For installation in Amazon OS commond

ASW --> **EC2, S3, RDS, Load Balancer, VPC**

DEVOPS ROAD MAP

