**Introduction to DevOps**

**1.Cloud:**

**What is cloud?**

Cloud refers to the network of servers it is used to store, and process and manage the data over internet virtually.

**Cloud Computing:**

Cloud computing is the delivery of services

In this we have two modes

1.Service mode - Saas,Paas,Iaas,Faas

2. Deployment mode - Private cloud , Public cloud , Hybrid cloud , Community cloud

About Saas

In cloud computing model cloud delivers the software over the internet we can use in our browser without installing in our local drivers it follows pas u use model.

About Paas

Platform as a service provides the platform for developer to build test and deploy the software.

About Iaas

It offers fundamental infrastructure over the internet such as servers storage and networking

About faas

We can run the pieces of code without managing servers we focus on only writing the code for specific task you need and cloud provider handles the rest.

About private cloud

In the name it self we have private means this cloud is used by only specific organization only we share the data or store the data within in the specific organization only

About public cloud

Public cloud is used by many users

About Hybrid cloud

Hybrid cloud is the combination of both the private cloud and public cloud

Community Cloud

In this cloud infrastructure is shared among the group of organizations with similar goals and requirements

**AWS(Amazon as a service)**

* Top most and best cloud provider
* First cloud introduced In the market
* It is the combination of Saas Paas and Iaas if it is the combination of saas and paas then we can say it is perfect combination of the cloud
* Without any physical space it allows to store the data
* We uses the policy pay as u go
* We have 18 geographical regions where AWS is covering
* It was started in 2005

**Top cloud providers**

1. Amazon web services – 37%
2. Azure Cloud – 27%
3. Google cloud – 15%
4. Alibaba – 10%
5. IBM Cloud – 7%

**DevOps Definition:**

DevOps is the process of delivering the Product or project. By ensuring the automation in place, ensuring the quality with continuous monitoring and continuous testing.

**Why DevOps :**

To deliver the software or project on time and to improve the collaboration and communication developers and communication team. To deliver the software in less time and with quality. And faster issue solving.

We Use **Waterfall model** and **agile model** in DevOps

Waterfall model for small projects

Agile model for larger projects

In water fall model we have :

1. Requirement and analysis
2. Design
3. Development
4. Testing
5. Deployment
6. Maintain/Support

In agile model we have:

1. Requirement and analysis
2. Design
3. Development
4. Testing
5. Deployment
6. Maintain/Support

If any error or negative feedback encountered again we do the system design phase the process will repeat until the feedback is positive