Devops Training

**1.what is cloud ?**

Cloud computing is a way of providing IT infrastructure to customers, it is not just a set of products to be implemented. For any service to be a cloud service.

**On-demand self-service:**Decision of starting and stopping service depends on customers without direct interaction with providers.

1. **Broad Network Access:**Service must be available to any device using any network.
2. **Resource Pooling:**Provider creates a pool of resources and dynamically allocates them to customers.
3. **Rapid Elasticity:**The services provided by the provider must be easily expandable and quick.
4. **Measured Services:**Provider must measure the usage of service and charge it accordingly. Tracking usage is also helpful in improving services.

**2. Difference between private and public cloud ?**

**1. Public Cloud:**

Computing in which service provider makes all resources public over the internet. It is connected to the public Internet. Service provider serves resources such as virtual machines, applications, storage, etc to the general public over the internet. It may be free of cost or with minimal pay-per-usage. It is available for public display, Google uses the cloud to run some of its applications like google docs, google drive or YouTube, etc.   
It is the most common way of implementing cloud computing. The external cloud service provider owns, operates, and delivers it over the public network.   
It is best for the companies which need an infrastructure to accommodate a large number of customers and work on projects which have diverse organizations i.e. research institutions and NGOs etc.

**2. Private Cloud:**

Computing in which service provider does not makes all resources public over the internet. It only supports connectivity over the private network. It has only authentic users and single-occupant architecture. Google back-end data of the applications like Google Drive, Google docs, YouTube, etc are not available to the public, these types of data and applications run on a private cloud.   
The infrastructure and services are maintained and deployed over a private network; hardware and software are dedicated only to a private company i.e. members of the special entity.

It is best for the companies which need an infrastructure that has high performance, high security, and privacy due to its best adaptability and flexibility.

**3.what are the top cloud providers?**

**1**. Amazon Web Services (AWS)

2. Microsoft Azure

3. Kamatera

4. Alibaba Cloud

5. Oracle Cloud

6. IBM Cloud (Kyndryl)

7. Tencent Cloud

8. OVHcloud

9. DigitalOcean

10. Linode(owned by Akamai)

**4.what is a server**

A server is a hardware device or software that processes requests sent over a network and replies to them. A client is the device that submits a request and waits for a response from the server. The computer system that accepts requests for online files and transmits those files to the client is referred to as a “server” in the context of the Internet.

**5.Differance between cloud and server ?**

Cloud refers to a pool of configurable computing resources like networks, servers, storage, applications and services that provides an on-demand access to these resources. The term is widely used in context of new architecture of networked systems that works as an on-demand model. A server can be referred to as a dedicated computer that provides services for one or more purposes. Servers are assigned heavy-duty back end tasks.

Cloud refers to a pool of configurable computing resources like networks, servers, storage, applications and services that provides an on-demand access to these resources. These servers are associated with various types of services that are provided through the internet. Thus, the term cloud is also considered as a metaphor for the 'internet'. Cloud scales according to demand, which means that the user only needs to pay for specific services that he requires. High performance of computing power is achieved by this cloud model. Cloud computing services are offered by various companies like IBM and Infosys.

Servers can be described as dedicated computers that provide services to other computers. The services depend upon the need or requirement. Servers are assigned some important tasks that are needed to be done in the backend. However, the dependency on these back end processes is quite high. One can differentiate servers from the normal computers as these servers consist of systems of disks. Generally, the desktops have a single hard drive, whereas in a server, various hard drives are configured to serve important purposes. All these disks appear to be a single disk to the user.

**6.What is a cloud computing** ?

**Cloud Computing** means storing and accessing the data and programs on remote servers that are hosted on the internet instead of the computer’s hard drive or local server. Cloud computing is also referred to as Internet-based computing, it is a technology where the resource is provided as a service through the Internet to the user. The data that is stored can be files, images, documents, or any other storable document.

The following are some of the Operations that can be performed with Cloud Computing

* Storage, backup, and recovery of data
* Delivery of software on demand
* Development of new applications and services
* Streaming videos and audio

**7.Types of cloud computings ?**

Infrastructure-as-a-Service(IaaS)

Software-as-a-Service(SaaS)

Platform-as-a-Service(PaaS)

**8. Basic knowledge of SD L C life cycle?**

Software development life cycle (SDLC) is a structured process that is used to design, develop, and test good-quality software**.** SDLC, or software development life cycle, is a methodology that defines the entire procedure of software development step-by-step. The goal of the SDLC life cycle **model** is to deliver high-quality, maintainable software that meets the user’s requirements. SDLC in software engineering models outlines the plan for each stage so that each stage of the software development model can perform its task efficiently to deliver the software at a low cost within a given time frame that meets users’ requirements.