1. **What is Cloud**

Cloud refers distributed collection of servers that are accessed over the Internet, and the software and databases that run on those servers.

1. **Difference between public and Private cloud.**

**Public Cloud:**

* Cloud Computing infrastructure is shared with the public by service providers over the internet. It supports multiple customers or enterprises.
* The cloud service provider manages the cloud and customers use them.

**Private Cloud:**

* Cloud Computing infrastructure is shared with private organizations by service providers over the Internet. It supports one enterprise.
* Managed and used by a single enterprise.

1. **Top 10 cloud Providers**

**1.AWS**

**2.Microsoft Azure**

**3.GCP**

**4.IBM**

**5.Oracle**

**6.** **Alibaba Cloud**

**7.Salesforce Cloud**

**8.Huawei Cloud**

**9.DigitalOcean**

**10.VMware Cloud**

1. **What is a server**

A server is a computer program that receives and responds to requests made over a network. For example, it receives a client's request for a web document and sends the requested information to the client's computer on the Internet.

1. **Difference between cloud and server**

**Cloud**: A network of remote servers that store and manage data, and provide computing resources over the internet, offering services like storage, computing, and software.Accessible remotely from any location via the internet on any device (laptop, smartphone, etc.).

**Server**: A physical or virtual machine that provides data, services, or applications to other devices over a network. It can be on-premises or hosted in a data center.Access is typically limited to the physical location of the server or via remote access tools, requiring proximity or specific network configurations.

**6. What is cloud computing**

Cloud computing is the process of storing and accessing data and programs on remote servers over the internet, instead of on local hard drives or servers.

**7. Types of cloud computing**

There are 3 Types of Cloud Computing models.

**1.IaaS:** It provides resources like servers, storage, and networking over the internet. Users have full control to customize and manage virtual machines, storage, and network settings as needed.

**2. Paas:** It provides a platform for developers to build, deploy, and manage applications without worrying about managing servers or infrastructure. It includes tools like development frameworks, databases, and middleware, making the app development process easier and faster.

**3.SaaS:** SaaS delivers software applications over the internet through a subscription, so users don't need to install, maintain, or update the software on their devices. Users can access the software from any device with an internet connection, offering flexibility and convenience.

**8. Basic knowledge of software development life cycle**

Software development life cycle (SDLC) is a structured process that is used to design, develop, and test good-quality software. The goal of the SDLC life cycle model is to deliver high-quality, maintainable software that meets the user’s requirements.

SDLC is a collection of these six stages:

1. **Planning and Requirement Analysis:** During this stage, developers gather and analyze requirements based on customer inputs and market surveys.

2. **Defining Requirements:** In this stage, the developer will know what are functional and nonfunctional and technical requirements are needed by utilizing the SRS(Software Requirement Specification.

3. **Designing Architecture:** In SRS it gives reference to the software developers with multiple architectures for the design.After evaluating all the factors most practical and logical design is chosen for the development.

4. **Developing Product:** In this stage development of the product starts.The developer will use any of the programming languages by considering some of the protocols like compiler, interpreter,debugger.

5. **Product Testing and Integration:**After Developing the product it should be tested in order to fix any bugs,errors to overcome.At every stage minimal testing is done at every SDLC.This product gives the quality of the SRS.

**6. Deployment and Maintenance of Products:** After testing , the product is released in terms of phases to the organization if it works smoothly then it is released fully to the organization based on the feedback they can improve their product.