-: AWS Interview Questions :-

1. **What is AWS?**

AWS stands for Amazon Web Services. It is a service which is provided by the Amazon that uses distributed IT infrastructure to provide different IT resources on demand. It provides different services such as an infrastructure as a service, platform as a service, and software as a service.

2. **What are Key-pairs?**

An Amazon EC2 uses public key cryptography which is used to encrypt and decrypt the login information. In public key cryptography, the public key is used to encrypt the information while at the receiver's side, a private key is used to decrypt the information. The combination of a public key and the private key is known as key-pairs. Key-pairs allows you to access the instances securely.

3. **Define and explain the three basic types of cloud services and the AWS products that are built based on them?**

The three basic types of cloud services are:

- Computing
- Storage
- Networking

Here are some of the AWS products that are built based on the three cloud service types:

Computing - These include EC2, Elastic Beanstalk, Lambda, Auto-Scaling, and Lightsat.

Storage - These include S3, Glacier, Elastic Block Storage, Elastic File System.

Networking - These include VPC, Amazon CloudFront, Route53

4. **What are the pricing models for EC2 instances?**

EC2 is part of the AWS services and enables users to rent virtual computers and run their programs. One can deploy applications on a large scale with the help of EC2. EC2 helps

users to boot an AMI (Amazon Machine Language) to access a virtual machine. The configuration of a virtual machine via AMI is called an *'instance'* by Amazon. You can launch, create, and stop many server instances with the help of EC2 for your business/organization. You will have to pay per second for the number of active servers while using EC2 for your business/firm.

There are four pricing models for EC2 instances:

On-Demand instance
Reserved instance
Spot instance
Dedicated Hosts

5. **What is AWS Lambda?**

AWS Lambda is a compute service that runs your code without managing servers. Lambda function runs your code whenever needed. You need to pay only when your code is running.

6. **How many buckets can be created in S3?**

By default, you can create up to 100 buckets.

7. **What is CloudFront?**

CloudFront is a computer delivery network which consists of distributed servers that delivers web pages and web content to a user based on the geographic locations of a user.

8. **What is the minimum and maximum size that you can store in S3?**

The minimum size of an object that you can store in S3 is 0 bytes and the maximum size of an object that you can store in S3 is 5 TB.

9. **What is AMI?**

AMI stands for Amazon Machine Image. It is a virtual image used to create a virtual machine within an EC2 instance. They can be shared with others.

10. What is VPC?

VPC stands for Virtual Private Cloud. It is an isolated area of the AWS cloud where you can launch AWS resources in a virtual network that you define. It provides a complete control on your virtual networking environment such as selection of an IP address, creation of subnets, configuration of route tables and network gateways.

11. How can you control the security to your VPC?

You can control the security to your VPC in two ways:

- **Security Groups**
  It acts as a virtual firewall for associated EC2 instances that control both inbound and outbound traffic at the instance level.
- **Network access control lists (NACL)**
  It acts as a firewall for associated subnets that control both inbound and outbound traffic at the subnet level.

12. **Explain various types of cloud service models in brief.**

There are three types of cloud services models that are:

- **IaaS –** Infrastructure as a Service (IaaS) allows users to access virtual computing resources with the help of the internet. A service provider hosts server, storage, hardware, etc. on behalf of the users via IaaS. IaaS platforms offer high scalability and can adapt according to the workload. IaaS providers also manage tasks of their users like system maintenance, backup, resilience, etc.
- **PaaS –** Platform as a Service (PaaS) helps service providers to deliver software and hardware tools to their users. It is especially used for the application development process, and one can receive applications from the service provider via the internet using PaaS. Users do not have to own in-house software/hardware for application development/testing as they can do it with the help of PaaS.
- **SaaS –** Software as a Service (SaaS) is a widely sold model by service providers for software distribution. On-demand computing software can be delivered using SaaS to the users/customers. The SaaS model is preferred as it is easy to administer and manage patches.