**Q. What are the different types of cloud services?**

**Ans.** Software as a Service (SaaS), Data as a Service (DaaS), Platform as a Service (PaaS), and Infrastructure as a Service (IaaS).

**Q. What is Amazon S3?**

**Ans.** Amazon S3 (Simple Storage Service) is an object storage with a simple web service interface to store and retrieve any amount of data from anywhere on the web.

**Q. What is auto-scaling?**

**Ans.**Auto-scaling is a feature of AWS which allows you to configure and automatically provision and spin-up new instances without the need for your intervention.

**Q. What is SimpleDB?**

**Ans.** It is a structured data store that supports indexing and data queries to both EC2 and S3.

**Q. What is an AMI?**

**Ans.** AMI (Amazon Machine Image) is a snapshot of the root filesystem.

**Q. What is the type of architecture, where half of the workload is on the public load while at the same time half of it is on the local storage?**

**Ans.** Hybrid cloud architecture.

**Q. Can I vertically scale an Amazon instance? How do you do it?**

**Ans.** Yes. Spinup a new larger instance than the one you are running, then pause that instance to detach the root ebs volume from this server and discard. After that, stop the live instance and detach its root volume. Note the unique device ID and attach that root volume to the new server, and start again. This way you will have scaled vertically.

**Q. How can you send request to Amazon S3?**

**Ans.** You can send request by using the REST API or the AWS SDK wrapper libraries that wrap the underlying Amazon S3 REST API.

**Q. How many buckets can be create in AWS by default?**

**Ans.** By default, 100 buckets can be created.

**Q. Should encryption be used for S3?**

**Ans.** Encryption should be considered for sensitive data as S3 is a proprietary technology.

**Q. What are the various AMI design options?**

**Ans.** Fully Baked AMI, JeOS (just enough operating system) AMI, and Hybrid AMI.

**Q. What is Geo Restriction in CloudFront?**

**Ans.** Geo restriction, also known as geoblocking, is used to prevent users in specific geographic locations from accessing content that you’re distributing through a CloudFront web distribution.

**Q. Explain what is T2 instances?**

**Ans.** T2 instances are designed to provide moderate baseline performance and the capability to burst to higher performance as required by workload.

**Q. What is AWS Lambda?**

**Ans.** AWS Lambda is a compute service that lets you run code in the AWS Cloud without provisioning or managing servers.

**Q. What is a Serverless application in AWS?**

**Ans.** The AWS Serverless Application Model (AWS SAM) extends AWS CloudFormation to provide a simplified way of defining the Amazon API Gateway APIs, AWS Lambda functions, and Amazon DynamoDB tables needed by your serverless application.

**Q. What is the use of Amazon ElastiCache?**

**Ans.** Amazon ElastiCache is a web service that makes it easy to deploy, operate, and scale an in-memory data store or cache in the cloud.

**Q. Explain how the buffer is used in Amazon web services?**

**Ans.** The buffer is used to make the system more robust to manage traffic or load by synchronizing different component.

**Q. Differentiate between stopping and terminating an instance**

**Ans.** When an instance is stopped, the instance performs a normal shutdown and then transitions to a stopped state.

When an instance is terminated, the instance performs a normal shutdown, then the attached Amazon EBS volumes are deleted unless the volume’s deleteOnTermination attribute is set to false.

**Q. Is it possible to change the private IP addresses of an EC2 while it is running/stopped in a VPC?**

**Ans.** The primary private IP address cannot be changed. Secondary private addresses can be unassigned, assigned or moved between interfaces or instances at any point.

**Q. What is the importance of buffer in Amazon Web Services?**

An Elastic Load Balancer ensures that the incoming traffic is distributed optimally across various AWS instances. A buffer will synchronize different components and makes the arrangement additional elastic to a burst of load or traffic. The components are prone to work in an unstable way of receiving and processing the requests. The buffer creates the equilibrium linking various apparatus and crafts them effort at the identical rate to supply more rapid services.

**Q. What is the way to secure data for carrying in the cloud?**

One thing must be ensured that no one should seize the information in the cloud while data is moving from point one to another and also there should not be any leakage with the security key from several storerooms in the cloud. Segregation of information from additional companies’ information and then encrypting it by means of approved methods is one of the options

**Q. Name the several layers of Cloud Computing.**

Here is the list of layers of the cloud computing

• PaaS – Platform as a Service

• IaaS – Infrastructure as a Service

• SaaS – Software as a Service

**Q. Distinguish between scalability and flexibility**

The aptitude of any scheme to enhance the tasks on hand on its present hardware resources to grip inconsistency in command is known as scalability. The capability of a scheme to augment the tasks on hand on its present and supplementary hardware property is recognized as flexibility, hence enabling the industry to convene command devoid of putting in the infrastructure at all. AWS has several configuration management solutions for AWS scalability, flexibility, availability and management.

**Q. Name the various layers of the cloud architecture**

There are 5 layers and are listed below

• CC- Cluster Controller

• SC- Storage Controller

• CLC- Cloud Controller

• Walrus

• NC- Node Controller

**Q. What is the relation between an instance and AMI?**

AMI can be elaborated as Amazon Machine Image, basically, a template consisting software configuration part. For example an OS, applications, application server. If you start an instance, a duplicate of the AMI in a row as an unspoken attendant in the cloud.

**Q. How the processes start, stop and terminate works? How?**

Starting and stopping of an instance: If an instance gets stopped or ended, the instance functions a usual power cut and then change over to a clogged position. You can establish the case afterward since all the EBS volumes of Amazon remain attached. If an instance is in stopping state, then you will not get charged for additional instance.

Finishing the instance: If an instance gets terminated it tends to perform a typical blackout, so the EBS volumes which are attached will get removed except the volume’s deleteOnTermination characteristic is set to zero. In such cases, the instance will get removed and cannot set it up afterward.

**Q. Is it possible to scale an Amazon instance vertically? How?**

Yes. This is an incredible characteristic of cloud virtualization and AWS. Spinup is a huge case when compared to the one which you are running with. Let up the instance and separate the root EBS volume from this server and remove. Next, stop your live instance, remove its root volume. Note down the distinctive device ID and attach root volume to your new server and start it again. This is the way to scaling vertically in place.

**Q. Which automation gears can help with spinup services?**

The API tools can be used for spinup services and also for the written scripts. Those scripts could be coded in Perl, bash or other languages of your preference. There is one more option that is patterned administration and stipulating tools such as a dummy or improved descendant. A tool called Scalr can also be used and finally we can go with a controlled explanation like a Rightscale.