# **AWS interview questions:**

### 1. What is AWS?

AWS (Amazon Web Services) is a cloud computing platform offered by Amazon.com, providing a wide range of services including computing power, storage, and networking, among others, to help businesses scale and grow.

## 2. Why AWS is used for?

The purpose of AWS is to provide a variety of services including storage, compute power, databases, and machine learning helping companies and users to build, run, and deploy their applications effectively with optimized performance, and cost-effectiveness.

## 3. What are the main components of AWS?

AWS comprises various services, but some of the key components include:

Compute (EC2, Lambda)

Storage (S3, EBS)

Databases (RDS, DynamoDB)

Networking (VPC, Route 53)

Management Tools (CloudFormation, IAM)

### 4. What is EC2?

EC2 (Elastic Compute Cloud) is a web service provided by AWS that allows users to rent virtual computers (instances) on which they can run their own applications.

### 5. What is \$3?

S3 (Simple Storage Service) is a scalable object storage service offered by AWS, designed to store and retrieve any amount of data from anywhere on the web.

#### 6. What is IAM?

IAM (Identity and Access Management) is a service that enables you to manage access to AWS services and resources securely. It allows you to create and manage users, groups, and permissions to grant or deny access to AWS resources.

## 7. What is Auto Scaling?

Auto Scaling is a feature of AWS that automatically adjusts the number of EC2 instances in a group based on demand. It helps maintain application availability and performance while minimizing costs.

### 8. What is a VPC?

VPC (Virtual Private Cloud) is a virtual network dedicated to your AWS account. It enables you to launch AWS resources, such as EC2 instances, into a virtual network that you define.

## 9. How do you ensure security in AWS?

Security in AWS is achieved through various measures including:

- IAM to control access to AWS resources
- VPC for network isolation
- Encryption at rest and in transit using services like AWS Key Management Service (KMS) and SSL/TLS

# 10. Explain the difference between S3 and EBS?

S3 (Simple Storage Service) is object storage, suitable for storing and retrieving large amounts of unstructured data. It's accessed over the internet and can store any type of data.

EBS (Elastic Block Store) provides block-level storage volumes for use with EC2 instances. It's used for persistent storage that can be attached to a single EC2 instance and is best suited for structured data that requires low-latency access.

## 11. What is Dynamo DB?

DynamoDB is a fully managed NoSQL database service provided by AWS. It offers fast and predictable performance with seamless scalability. DynamoDB is suitable for applications that require low-latency and can handle large amounts of data with flexible querying capabilities.

# 12. Explain the concept of a serverless architecture.

Serverless architecture refers to a cloud computing model where the cloud provider manages the infrastructure and dynamically allocates resources as needed. Developers focus on writing code (typically in the form of functions) that runs in stateless compute containers, such as AWS Lambda. Serverless architectures are highly scalable, cost-effective, and require minimal operational overhead.