

Lesson 1

1. Which is not the way to call and use AWS services? **Answer D**
 - a. AWS Console
 - b. SDK
 - c. CLI
 - d. EC2
2. What does IaaS stand for? **Answer A**
 - a. Infrastructure as a Service
 - b. Internet as a Service
 - c. Integrated as a Service
 - d. Information as a Service
3. Which cloud service model allows developers to build, deploy, and manage applications without dealing with the underlying infrastructure? **Answer B**
 - a. IaaS (Infrastructure as a Service)
 - b. PaaS (Platform as a Service)
 - c. CaaS (Container as a Service)
 - d. SaaS (Software as a Service)
4. SaaS model provides... **Answer C**
 - a. allows developers to build, deploy, and manage applications without dealing with the underlying infrastructure
 - b. a container management service to users
 - c. software applications over the internet on a subscription basis
 - d. provides virtualized computing resources over the internet
5. Which cloud model allows to develop, run, and manage application functionalities without the complexity of building and maintaining the infrastructure and servers.
Answer C
 - a. IaaS (Infrastructure as a Service)
 - b. PaaS (Platform as a Service)
 - c. FaaS (Function as a Service)
 - d. SaaS (Software as a Service)
6. FaaS service in AWS is — **Answer B**
 - a. EC2
 - b. Lambda
 - c. S3
 - d. EBS
7. Which cloud service model involves running applications in virtual machines? **Answer A**
 - a. IaaS (Infrastructure as a Service)
 - b. PaaS (Platform as a Service)
 - c. FaaS (Function as a Service)
 - d. SaaS (Software as a Service)

1. What is the main characteristic of Infrastructure as a Service (IaaS)?
- A. Provides ready-to-use applications over the internet.
 - B. Allows users to run their applications without managing the underlying infrastructure.
 - C. Offers a platform with tools and services for application development.
 - D. Delivers functions that respond to events without provisioning or managing servers.

Answer: B

2. Which cloud model is most suitable for a developer looking to build and deploy an application without worrying about managing the hardware or operating system?
- A. Infrastructure as a Service (IaaS).
 - B. Platform as a Service (PaaS).
 - C. Function as a Service (FaaS).
 - D. Software as a Service (SaaS).

Answer: B

3. In Function as a Service (FaaS), how is the code executed?
- A. In long-running server instances.
 - B. In dedicated virtual machines.
 - C. In response to specific events or triggers.
 - D. In predefined time intervals.

Answer: C

4. What is the primary feature of Software as a Service (SaaS)?
- A. Allows users to manage and control the infrastructure.
 - B. Provides a platform for application development.

- C. Delivers ready-to-use applications over the internet.
- D. Offers containers for deploying applications.

Answer: C

5. Which cloud model is focused on delivering a container orchestration environment for deploying and managing applications?

- A. Infrastructure as a Service (IaaS).
- B. Platform as a Service (PaaS).
- C. Function as a Service (FaaS).
- D. Container as a Service (CaaS).

Answer: D

Lesson 2

1. Which of the following statements about AWS regions and availability zones is correct?

Answer A

- a. AWS regions are isolated geographical locations, while availability zones are isolated data centers within a region.
- b. AWS regions and availability zones are terms used interchangeably to refer to the same concept.
- c. AWS regions and availability zones are only relevant for specific AWS services and do not affect the overall performance of applications.
- d. AWS regions are individual servers within a data center, while availability zones are clusters of servers within a region.

2. What is the primary purpose of AWS regions and availability zones? **Answer C**

- a. AWS regions are used for billing and account management, while availability zones are used for resource deployment.
- b. AWS regions are designed for high availability and fault tolerance, while availability zones are used for data backup and disaster recovery.
- c. AWS regions enable users to choose the geographical location of their resources, while availability zones provide isolated locations within a region to ensure resiliency and minimize the impact of failures.

- d. AWS regions are specific to Amazon S3 storage, while availability zones are relevant only for Amazon EC2 instances.
3. What is the primary function of edge servers in a content delivery network (CDN)?
- Answer C**
- a. Edge servers store original copies of website content, ensuring data security and backup.
 - b. Edge servers optimize website code and improve front-end performance by compressing images and scripts.
 - c. Edge servers cache and deliver content to users from servers located closer to their geographical location, reducing latency and speeding up content delivery.
 - d. Edge servers handle backend database transactions and ensure seamless data synchronization across multiple servers.
4. What does VPC stand for in the context of Amazon Web Services (AWS)? **Answer A**
- a. Virtual Private Cloud
 - b. Very Personal Computer
 - c. Virtual Processing Center
 - d. Visual Private Connection
5. Which of the following statements is correct for security groups in VPC? **Answer B**
- a. NACL can be understood as the firewall or protection for the EC2 instances.
 - b. Security group can be understood as a firewall to protect EC2 instances.
 - c. NACL can be understood as the firewall or protection for the subnet and EC2 instance both.
 - d. Security group can be understood as a firewall to protect the subnet.
6. Which of the following is true about AWS EC2 instances? **Answer B**
- a. EC2 instances can only be used for storing data and cannot execute applications.
 - b. EC2 instances are pre-configured virtual machines that can be customized based on your requirements and used to run applications on the AWS cloud.
 - c. EC2 instances are physical servers located at Amazon's data centers, accessible via a dedicated network connection.
 - d. EC2 instances are limited to a specific geographic region and cannot be accessed from different regions.
7. What is the primary purpose of an Amazon Machine Image (AMI) in the context of AWS EC2? **Answer C**
- a. AMI is used to store and manage data in Amazon S3.
 - b. AMI is a backup solution for EC2 instances.
 - c. AMI is a pre-configured virtual machine image, which is used to create EC2 instances.
 - d. AMI is a tool for monitoring network traffic within an EC2 instance.
8. Which of the following is a benefit of using Amazon Elastic Block Store (EBS) volumes with EC2 instances? **Answer B**
- a. EBS volumes cannot be resized, ensuring predictable and stable performance for EC2 instances.

- b. EBS volumes provide durable and resizable block-level storage that can be easily attached to multiple EC2 instances, allowing for data persistence and flexibility in managing storage capacity.
 - c. EBS volumes are limited to a specific region and cannot be used for cross-region replication.
 - d. EBS volumes are primarily used for temporary storage and are automatically deleted when an EC2 instance is terminated.
9. What is the primary purpose of AWS Identity and Access Management (IAM)? **Answer B**
- a. IAM is used for creating and managing virtual servers in AWS.
 - b. IAM is used for securely managing user identities, roles, and permissions within an AWS environment.
 - c. IAM is a service for monitoring network traffic and optimizing data transfer within AWS.
 - d. IAM is a backup service for storing user data and configurations in AWS.
10. What is an IAM policy in AWS? **Answer B**
- a. An IAM policy is a set of rules used to configure network firewalls in AWS.
 - b. An IAM policy is a document that defines permissions for actions within specified resources in AWS.
 - c. An IAM policy is a tool used to monitor the performance of EC2 instances in real-time.
 - d. An IAM policy is a service for automatically scaling resources based on user demand in AWS.
11. What is the purpose of multi-factor authentication (MFA) in the context of AWS IAM?
- Answer B**
- a. MFA is used for automatically scaling AWS resources based on user demand.
 - b. MFA adds an extra layer of security by requiring users to present two or more separate forms of identification (factors) to verify their identity before accessing AWS resources.
 - c. MFA is a tool for managing load balancing across multiple AWS regions.
 - d. MFA is used for configuring automated backups of AWS resources.

Lesson 3 - S3

1. Which feature allows you to receive notifications when certain events happen in your S3 buckets?
- Answer A**
- a. S3 Event Notifications
 - b. S3 Event Triggers
 - c. S3 Event Handlers
 - d. S3 Event Listeners

2. Which method of encrypting objects in S3 allows you to generate your own key and use it to encrypt data? **Answer C**
- SSE-S3
 - SSE-KMS
 - SSE-C
 - Client-Side Encryption
3. Which method of encrypting objects in S3 requires you to encrypt the data before storing it in S3? **Answer D**
- SSE-S3
 - SSE-KMS
 - SSE-C
 - Client-Side Encryption
4. What are the three types of permissions in S3? **Answer A**
- Identity-based, resource-based, and access control list
 - Identity-based, role-based, and access control list
 - Identity-based, resource-based, and policy-based
 - Identity-based, role-based, and policy-based
5. What is the difference between file storage and object storage? **Answer B**
- File storage divides data into blocks of equal sizes, while object storage stores data as flat units with metadata.
 - File storage organizes data in a hierarchical structure of folders and files, while object storage stores data as flat units with metadata.
 - File storage stores data as flat units with metadata, while object storage organizes data in a hierarchical structure of folders and files.
 - File storage stores data as flat units with metadata, while object storage divides data into blocks of equal sizes.
6. What is the cost of deleting an object from an S3 bucket using the DeleteObject API call? **Answer D**
- \$0.0004 per 1,000 requests
 - \$0.005 per GB deleted
 - Depends on the region and storage class
 - \$0
7. Which of the following factors affects the pricing of S3 storage? **Answer C**
- Region
 - Type of request
 - Both Options A and B
 - Neither Option A nor B
8. What is the unique identifier for an object within a bucket? **Answer A**
- Key
 - Name
 - ID
 - Tag
9. Which URL grants temporary access to an S3 object? **Answer B**
- Signed URL
 - Pre-signed URL
 - Secure URL
 - Access URL
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Lesson 4

1. Which feature allows you to specify how many instances you want to run in your Auto Scaling Group at any given time? **Answer A**
 - a. Desired Capacity
 - b. Minimum Capacity
 - c. Maximum Capacity
 - d. Target Capacity
2. What allows you to create a template for launching EC2 instances with predefined configurations in your Auto Scaling Group? **Answer B**
 - a. Launch Configuration
 - b. Launch Template
 - c. Launch Profile
 - d. Launch Policy
3. Which feature allows you to scale your Auto Scaling Group based on a metric value? **Answer C**
 - a. Simple Scaling
 - b. Step Scaling
 - c. Target Tracking Scaling
 - d. Scheduled Scaling
4. What are the two protocols that you can use to connect to your application load balancer? **Answer A**
 - a. HTTP and HTTPS
 - b. TCP and UDP
 - c. HTTP and TCP
 - d. HTTPS and UDP
5. What allows you to scale your Auto Scaling Group based on a schedule or a date and time? **Answer D**
 - a. Simple Scaling
 - b. Step Scaling
 - c. Target Tracking Scaling
 - d. Scheduled Scaling
6. What are the two types of listeners that you can create for your load balancer? **Answer D**
 - a. Request and Response
 - b. Source and Destination
 - c. Rule and Action
 - d. Protocol and Port
7. What allows you to scale your Auto Scaling Group based on a set of scaling adjustments that vary based on the size of the alarm breach? **Answer B**
 - a. Simple Scaling
 - b. Step Scaling
 - c. Target Tracking Scaling

- d. Scheduled Scaling
 - 8. Which feature of the ALB allows you to route incoming requests based on the URL path to different target groups?
 - a. ALB Listener Rules
 - b. ALB Path Routing
 - c. ALB URL Mapping
 - d. ALB Path-Based Routing
 - 9. Auto Scaling Group contains
 - a. Networking (AZs)
 - b. Scaling policies
 - c. Load Balancer
 - d. All of the above
 - 10. Network load balancer operates at
 - a. Operates at OSI Layer 7 (Application)
 - b. Operates at OSI Layer 4 (Transport)
 - c. Both
 - d. None
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Lesson 5

1. Which of the following is NOT a benefit of using RDS as a managed service? **Answer B**
 - a. RDS automatically takes backups and transaction logs for point-in-time recovery
 - b. RDS allows shell access to DB instances and certain system procedures
 - c. RDS improves availability and durability by creating a standby instance or read replica in a different AZ
 - d. RDS manages common database administration tasks
2. What is the benefit of using IAM tokens to access databases in RDS? **Answer D**
 - a. It allows you to store the DB username and password on the application server
 - b. It enables you to run DB instances in the VPC in public subnet
 - c. It eliminates the need to use a security group to control the access to a DB instance
 - d. It avoids the exposure of the DB credentials in plain text or in encrypted form
3. What is the formula to calculate the base IOPS of a general-purpose EBS volume?
Answer C
 - a. Volume size in GiB / 3
 - b. Volume size in GiB x 10
 - c. Volume size in GiB x 3
 - d. Volume size in GiB / 10
4. What is the difference between backups and snapshots in RDS? **Answer A**
 - a. Backups are automatically enabled and taken daily, while snapshots are manually triggered by the user

- b. Backups are manually triggered by the user, while snapshots are automatically enabled and taken daily
 - c. Backups are taken from the primary DB instance, while snapshots are taken from the standby DB instance
 - d. Backups are taken from the standby DB instance, while snapshots are taken from the primary DB instance
- 5. What is the main difference between RDS (Non-Aurora) and Aurora in terms of Multi-AZ deployment? **Answer B**
 - a. RDS (Non-Aurora) creates an asynchronous standby instance or cluster, while Aurora creates a synchronous read replica
 - b. RDS (Non-Aurora) creates a synchronous standby instance or cluster, while Aurora creates an asynchronous read replica
 - c. RDS (Non-Aurora) creates a synchronous read replica, while Aurora creates an asynchronous standby instance or cluster
 - d. RDS (Non-Aurora) creates an asynchronous read replica, while Aurora creates a synchronous standby instance or cluster
- 6. What is the main benefit of using Amazon RDS Read Replicas? **Answer B**
 - a. They provide synchronous replication of data from the primary DB instance
 - b. They provide enhanced performance and scalability for read-intensive workloads
 - c. They provide automatic failover and data redundancy in case of a primary DB instance failure
 - d. They provide full control over the underlying storage and DB engine configuration
- 7. What is the advantage of using the underlying storage to share data between the primary instance and the Aurora replicas in Amazon Aurora? **Answer C**
 - a. It increases the replication lag to more than 10 milliseconds
 - b. It eliminates the need for automatic failover in case of a primary instance failure
 - c. It reduces the replication lag to less than 10 milliseconds
 - d. It creates a synchronous standby instance or cluster in a different Availability Zone
- 8. What is the main benefit of using the Aurora cloning feature to create a new cluster? **Answer A**
 - a. It is faster and more space-efficient than physically copying the data
 - b. It is slower and more space-efficient than physically copying the data
 - c. It is faster and less space-efficient than physically copying the data
 - d. It is slower and less space-efficient than physically copying the data
- 9. What is the unit of measurement for the compute and memory capacity of an Aurora Serverless v2 DB cluster? **Answer D**
 - a. Elastic compute unit (ECU)
 - b. Virtual processor unit (VPU)
 - c. Memory allocation unit (MAU)
 - d. Aurora capacity unit (ACU)
- 10. What is the purpose of a bastion (jump) server in AWS? **Answer A**
 - a. It is a dedicated server that lets authorized users access a private network from an external network

- b. It is a dedicated server that lets authorized users access an external network from a private network
- c. It is a dedicated server that lets authorized users access a public network from an internal network
- d. It is a dedicated server that lets authorized users access an internal network from a public network