

AWS ASSIGNMENT - 1

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PART A (Theory)

1. What is AWS?

Amazon Web Services (AWS) is the world's most comprehensive and broadly adopted cloud platform, offering over 175 fully featured services from data centers globally. Millions of customers—including the fastest-growing startups, largest enterprises, and leading government agencies—are using AWS to lower costs, become more agile, and innovate faster.

2. What are the components of AWS?

- Amazon cluster(Elastic cloud computer - EC2)
- Storage
- Databases
- Management and security
- Networks
- Analytics
- Application services
- Implementation and management
- Mobile services

3. What are Key-pairs?

A key pair, consisting of a private key and a public key, is a set of security credentials that you use to prove your identity when connecting to an instance. Amazon EC2 stores the public key, and you store the private key. You use the private key, instead of a password, to securely access your instances.

4. What are the pricing models for EC2 instances?

- On-Demand Instances
- Spot Instances
- Reserved Instances
- Dedicated Hosts

5. What are Regions and Availability Zones in AWS?

AWS Regions are large and widely dispersed into separate geographic locations. Availability Zones are distinct locations within an AWS Region that are engineered to be isolated from failures in other Availability Zones.

6. What are edge locations in AWS?

Edge locations are a site that CloudFront uses to cache copies of your content for faster delivery to users at any location.

7. What is AMI?

An Amazon Machine Image is a special type of virtual appliance that is used to create a virtual machine within the Amazon Elastic Compute Cloud. It serves as the basic unit of deployment for services delivered using EC2.

8. What are different types of instances?

- A1
- C4
- C5
- C5a
- C5ad
- C5d
- C5n

- C6g
- C6gd
- D2
- F1
- G3
- G4
- H1
- I3
- I3gen
- Inf1
- M4
- M5
- M5a
- M5ad
- M5d
- M5dn
- M5n
- M6g
- M6gd
- P2
- P3
- P3dn
- P4
- R4
- R5
- R5a
- R5ad
- R5d
- R5dn
- R5n
- R6g
- R6gd
- T2
- T3

- T3a
- T4g
- u-xtb1
- X1
- X1e
- z1d

9. Difference between stopping and terminating the instances?

When you terminate an EC2 instance, the instance will be shut down and the virtual machine that was provisioned for you will be permanently taken away and you will no longer be charged for instance usage. Any data that was stored locally on the instance will be lost. Any attached EBS volumes will be detached and deleted. When you stop an EC2 instance, the instance will be shut down and the virtual machine that was provisioned for you will be permanently taken away and you will no longer be charged for instance usage. The key difference between stopping and terminating an instance is that the attached bootable EBS volume will not be deleted. The data on your EBS volume will remain after stopping while all information on the local (ephemeral) hard drive will be lost as usual. The volume will continue to persist in its availability zone. Standard charges for EBS volumes will apply.

10.What are the different database types in RDS?

Amazon RDS is available on several database instance types - optimized for memory, performance or I/O - and provides you with six familiar database engines to choose from, including Amazon Aurora, PostgreSQL, MySQL, MariaDB, Oracle Database, and SQL Server.

Part B(Practical)

Added as attachment.