# **AWS SERVICES**

## Amazon S3:

S3 is a highly scalable and durable object storage service that allows you to store and retrieve data from anywhere on the web. It provides secure, cost-effective storage for various types of data, such as images, videos, documents, and backups.

### RDS:

RDS is a managed database service that makes it easy to set up, operate, and scale relational databases in the cloud. It supports popular database engines like MySQL, PostgreSQL, Oracle, and SQL Server, providing automated backups, high availability, and seamless scaling capabilities.

### **GLUE:**

Glue is a fully managed extract, transform, and load (ETL) service that makes it easy to prepare and transform data for analytics. It automatically discovers and catalogs data from various sources, allowing you to create data pipelines for analysis and processing.

### **Redshift:**

Redshift is a fast and fully managed data warehousing service that enables you to analyze large datasets. It provides high-performance querying capabilities and allows you to scale your cluster as per your needs, making it ideal for data warehousing and business intelligence applications.

#### IAM role:

IAM roles are a secure and efficient way to grant permissions to AWS services and resources. They define a set of permissions and policies that determine what actions can be performed on AWS resources. Roles are commonly used to grant permissions to services like EC2 instances or Lambda functions.

## **Crawler:**

A Glue crawler is an automated service that scans your data sources, such as S3 buckets or databases, and creates a data catalog with metadata about the discovered data. It helps in understanding the schema, structure, and format of your data, making it easier to query and analyze.

#### Athena:

Athena is a serverless query service that enables you to analyze data directly from various data sources using standard SQL queries. It doesn't require any infrastructure setup and can query

data stored in S3, Glue, or other supported data sources, providing fast and cost-effective analysis.

## Quicksight:

QuickSight is a business intelligence service that allows you to create interactive dashboards, reports, and visualizations. It integrates with various data sources, including S3, RDS, Redshift, and Athena, making it easy to explore and gain insights from your data.

## Lambda:

Lambda is a serverless computing service that lets you run your code without provisioning or managing servers. It automatically scales based on the incoming requests, and you only pay for the compute time consumed. It's commonly used for event-driven and microservices architectures.

## EC2:

EC2 (Elastic Compute Cloud) is a scalable virtual server service that provides resizable compute capacity in the cloud. It allows you to create and manage virtual machines, known as instances, providing flexibility and control over your computing resources. EC2 is widely used for various applications, from web hosting to complex enterprise workloads.