ByteWise Fellowship – Week 10

Task#1 Date: 16-May-2023

**IAM Role**

IAM Role is an AWS Identity and Access Management entity that defines a set of permissions for making AWS service requests. It allows you to grant permissions to AWS resources without the need for access keys.

**S3 (Simple Storage Service**)

Amazon S3 is an object storage service that offers industry-leading scalability, durability, and security for storing and retrieving any amount of data. It provides a simple web services interface to store and retrieve data from anywhere on the web.

**RDS (Relational Database Service)**

Amazon RDS is a fully managed database service that simplifies the deployment, management, and scaling of relational databases in the cloud. It supports popular database engines such as MySQL, PostgreSQL, Oracle, SQL Server, and provides automated backups, high availability, and automated software patching.

**Crawler**

In AWS Glue, a Crawler is an automated tool that scans and analyzes data sources such as Amazon S3, DynamoDB, or relational databases. It generates the metadata that is used for querying and processing the data in a more structured manner.

**Athena**

Amazon Athena is an interactive query service that enables you to analyze data directly from Amazon S3 using standard SQL. It eliminates the need for infrastructure management and allows you to query data in various formats without defining a schema.

**QuickSight**

Amazon QuickSight is a business intelligence and data visualization service that helps you create interactive dashboards, perform ad-hoc analysis, and share insights across your organization. It supports various data sources and offers powerful visualization capabilities.

**Lambda**

AWS Lambda is a serverless computing service that allows you to run code without provisioning or managing servers. It executes your code in response to events, scales automatically, and charges you based on the compute time consumed.

**EC2**

Amazon EC2 (Elastic Compute Cloud) is a scalable virtual machine service that enables you to provision and manage virtual servers in the cloud. It offers flexibility in instance configuration, auto-scaling capabilities, and integrates with other AWS services.

**Glue**

AWS Glue is a fully managed extract, transform, and load (ETL) service that simplifies the process of preparing and loading data for analytics. It provides crawlers to automatically discover and catalog data, and allows you to create ETL jobs to transform and load data into various target systems.

**Redshift**

Amazon Redshift is a fast, fully managed, petabyte-scale data warehousing service. It allows you to analyze large volumes of data using standard SQL queries and provides high-performance query execution with columnar storage and parallel processing.