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Exp.No.	01	Cloud Account Setup and Services Overview	Year/Sem	
Date	08/03/2025		Branch	

## AIM:

To create an AWS cloud account and explore its various services.

#### PROCEDURE:

- 1. Go to the AWS official website (<a href="https://aws.amazon.com/">https://aws.amazon.com/</a>) and click on "Create an AWS Account."
- 2. Enter the required details such as email, name, and password to sign up.
- 3. Choose the account type (Personal or Business) and fill in the required information.
- 4. Provide billing details (Credit/Debit card information) for verification purposes.
- 5. Complete identity verification through OTP or call-based confirmation.
- 6. Select a support plan (Basic Free Tier is recommended for beginners).
- 7. Log in to the AWS Management Console using the registered credentials.
- 8. Explore the AWS dashboard and navigate through various services available.

## **AWS OVERVIEW:**

Amazon Web Services (AWS) is a comprehensive and widely adopted cloud platform that offers more than 200 fully featured services from data centers globally. It provides scalable, reliable, and cost-effective cloud computing solutions for businesses and individuals. AWS enables users to deploy applications, manage databases, store data securely, and leverage AI/ML capabilities, among many other functionalities. With a pay-as-you-go pricing model, AWS ensures cost efficiency, allowing businesses to scale resources based on demand. Its global infrastructure ensures high availability and security, making it the preferred choice for startups, enterprises, and government organizations.

#### **SERVICES IN AWS:**

i. Compute Services (e.g., EC2, Lambda, Elastic Beanstalk)

- Amazon EC2 (Elastic Compute Cloud): Provides resizable virtual servers for hosting applications and managing computing workloads.
- **AWS Lambda:** Enables serverless computing by allowing users to run code in response to events without provisioning servers.
- Elastic Beanstalk: Simplifies application deployment by automatically handling load balancing, scaling, and monitoring.
- ii. Storage Services (e.g., S3, EBS, Glacier)
- Amazon S3 (Simple Storage Service): Offers scalable object storage for storing and retrieving any amount of data from anywhere.
- Amazon EBS (Elastic Block Store): Provides persistent block storage for use with EC2 instances.
- Amazon Glacier: A low-cost storage service for data archiving and long-term backup.
- iii. **Networking Services** (e.g., VPC, Route 53, CloudFront)
- Amazon VPC (Virtual Private Cloud): Allows users to create isolated network environments for their AWS resources.
- Amazon Route 53: A scalable domain name system (DNS) service for routing enduser requests.
- **Amazon CloudFront:** A content delivery network (CDN) service that speeds up the distribution of web content.
- iv. **Database Services** (e.g., RDS, DynamoDB, Redshift)
- Amazon RDS (Relational Database Service): Provides managed relational databases like MySQL, PostgreSQL, and SQL Server.
- Amazon DynamoDB: A fully managed NoSQL database for fast and scalable applications.
- Amazon Redshift: A data warehousing service optimized for analytics and reporting.
- v. Security & Identity Services (e.g., IAM, Shield, Cognito)
- **AWS IAM (Identity and Access Management):** Helps manage access permissions and security credentials for AWS resources.
- AWS Shield: Protects against DDoS attacks to ensure high availability and security.
- Amazon Cognito: Provides authentication and user identity management for web and mobile applications.
- vi. AI & Machine Learning Services (e.g., SageMaker, Rekognition, Lex)
- Amazon SageMaker: Enables developers to build, train, and deploy machine learning models efficiently.
- Amazon Rekognition: A computer vision service that analyzes images and videos for object and facial recognition.

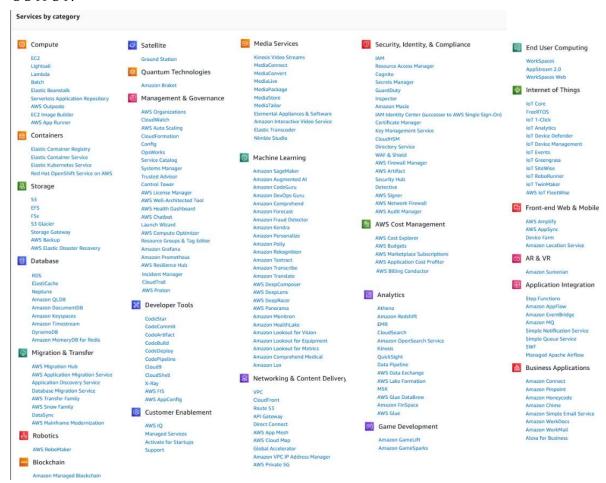
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 Amazon Lex: A chatbot service that powers conversational interfaces using AI and natural language processing.

# **APPLICATIONS IN AWS:**

- 1. Web Hosting and Content Delivery
- 2. Data Storage and Backup
- 3. Machine Learning and AI Development
- 4. IoT (Internet of Things) Applications
- 5. Big Data Analytics
- 6. Mobile and Web App Development

## **OUTPUT:**



# **CONCLUSION:**

By following the procedure, an AWS cloud account was successfully created, and its various services were explored. AWS provides a wide range of services for computing,

storage, networking, security, and AI, making it a robust cloud platform for various applications.

# RESULT:

Thus, the AWS account was successfully created and explored the services provided by AWS cloud .