

## Cloud Computing Assignment :- 01

Ques:- Define the following AWS Services in brief?

- 1) **EC2**:- Amazon Elastic cloud (EC2) is a web service that provides secure, resizable compute capacity in the cloud. It is designed to make web-scale cloud computing easier for developers. Its simple interface allows you to obtain and configure capacity with minimal friction, providing complete control of your computing resources.
- 2) **Elastic Beanstalk**:- An easy to use service for deploying and scaling web applications and services developed with Java, .NET, PHP, Node.js, Python, Ruby, Go & Docker on familiar services like Apache, Nginx, Passenger and IIS.
- 3) **IAM**:- AWS Identity and Access Management (IAM) provides fine-grained access control across all AWS. With IAM, you can specify who can access which services & resources, under which conditions. Also, we can manage permissions to your work force & systems to ensure least-privilege permissions.
- 4) **ELB**:- Elastic Load Balancing (ELB) automatically distributes incoming application traffic across multiple targets & virtual appliances in one or more Availability Zones (AZs).
- 5) **S3**:- Amazon Simple Storage Service is an object storage service offering industry-leading scalability, data availability, security and performance, customers of all sizes and



Performance can store and project any amount of data for virtually any use case, such as data lake cloud native applications & mobile apps.

- 6) EBS: Amazon Elastic Block Store is an easy to use scalable high-performance block-storage service designed for Amazon Elastic Compute Cloud and is used by Amazon Relational Database Service.
- 7) FSx for Lustre: Provides fully managed, shared storage with scalability and performance of popular Lustre file system. The FSx for Lustre make it easy and cost effective to launch, run and scale the world's most high performance file system.
- 8) Glacier: These are Amazon S3 storage classes that are built for the purpose of data archiving, providing you with the highest performance, most retrieval flexibility and lowest cost archive storage in the cloud. All S3 Glacier storage classes provide virtually unlimited scalability and are designed for 99.999% of data durability.
- 9) Sagemaker: Amazon Sagemaker is a cloud machine-learning platform that enables developers, data scientists to create, train and deploy machine models in the cloud and also to deploy ML models on embedded systems and edge systems.



- 10) Recognition:- Amazon Rekognition offers pre-trained and customizable computer vision (CV) capabilities to extract information and insights from your images and videos. It makes easy to add image and video analysis to our application highly proven deep learning technology.
- 11) SNS:- Amazon Simple Notification Service is a full managed messaging services for both application to application (A2A) and application to person (A2P) communication. It provides for high throughput based many-to-many messaging between distributed systems and serverless applications.
- 12) SES:- Amazon Simple Email Service (SES) is cost-effective, flexible and scalable email service that enables developers to send mail from within any application. You can configure Amazon SES quickly to support several email use cases including transactional and mass.
- 13) Lambda:- AWS Lambda is a serverless, event-driven compute service that lets you run code for virtual any type of application or backend service without provision or managing servers i.e. it runs the code in response to events and automatically manages computing resources required by that code.
- 14) RDS:- Amazon Relational Database Service makes it easy to set up, operate and scale a relational database in the



cloud. It provides cost effective and resizable capacity while automating time consuming administration tasks such as hardware provisioning, database set up, patching and backup.

15) Cloud 9:- AWS cloud 9 is a cloud based integrated development environment (IDE) that lets you write, run and debug your code with just a browser. It includes a code editor, debugger and terminal. It comes with prepackaged essential tools for popular programming language including Javascript, Python, PHP.

16) Cognito:- AWS Cognito lets you add user-sign-up, sign-in and access control to your web and mobile apps quickly and easily. It scales to millions of users and supports sign-in with social identity providers like Apple, Google and enterprise identity providers like SAML 2 and OpenID.

17) VPC:- Amazon Virtual Private Cloud (VPC) gives complete control over your virtual networking including resource placement, connectivity and security. It provides a virtual private cloud by logically isolating a section of the cloud. Enterprise customers are able to access Amazon Elastic Compute Cloud over an IPsec based virtual private network.

18) Route 53:- It is a highly available and scalable cloud Domain Name System (DNS) web service. It is designed to give developers and businesses an extremely reliable and cost effective way to route and users to internet applications by translating names into numeric IP addresses that computers use to connect to each other.