**What is Amazon EC2**

Amazon Elastic Compute Cloud (Amazon EC2) is a service that provides secure and scalable computing capacity in the Amazon Web Services (AWS) cloud.

It is designed to make web-scale computing easier for developers.

**Features of Amazon EC2**

Amazon Elastic Compute Cloud (Amazon EC2) provides the following features.

**1.** Virtual computing environments, known as **instances.**

**2.** Preconfigured templates for your instances, known as **Amazon Machine Images (AMIs)**, that package the bits you need for your server (including the operating system and additional software).

**3.** Various configurations of CPU, memory, storage, and networking capacity for your instances, known as **instance types**.

**4.** Secure login information for your instances using **key pairs** (AWS stores the public key, and you store the private key in a secure place).

**5.** Storage volumes for temporary data that's deleted when you stop or terminate your instance, known as **instance store volumes**.

**6.** Persistent storage volumes for your data using Amazon Elastic Block Store (Amazon EBS), known as **Amazon EBS volumes**.

**7.** Multiple physical locations for your resources, such as instances and Amazon EBS volumes, known as **Regions and Availability Zones**.

**8.** A firewall that enables you to specify the protocols, ports, and source IP ranges that can reach your instances using **security groups**.

**9.** Static IPv4 addresses for dynamic cloud computing, known as **Elastic IP addresses**.

**10.** Metadata, known as **tags,** that you can create and assign to your Amazon EC2 resources.

**11.** Virtual networks you can create that are logically isolated from the rest of the AWS cloud, and that you can optionally connect to your own network, known as **virtual private clouds (VPCs)**.