**Amazon Web Services:**

*Amazon Elastic Compute Cloud (Amazon EC2) provides* ***scalable computing capacity*** *in the Amazon Web Services (AWS) cloud.*

**EC2** stands for **Elastic Compute Cloud.**

* EC2 instance is a virtual server in Amazon Elastic Compute cloud(EC2).
* EC2 instance comprises of varying combination of CPU, memory, storage and network capacity.
* We use EC2 to launch as many or few virtual servers.
* EC2 lets us to create and launch servers in AWS cloud.
* Using Amazon EC2 eliminates need to invest in hardware up front, we can develop and deploy applications faster.

**S3** stands for **Simple storage Services**.

* Provides public cloud storage resource in Amazon Web Services (AWS) cloud.

**Elastic Beanstalk - is an environment.**

* We can create configure and manage Elastic Bean environment. After we launch instance, we can connect to it by using it from local computer.
* It brings together AWS services like EC2, Auto scaling and S3 for the purpose of deploying elastic cloud application.
* Is an easy-to-use service for deploying and scaling web applications, services developed in Java, .NET, PHP, etc. Docker on familiar Servers as Apache, NGINX, Passenger, IIS etc.
* It automatically handles every aspect in the cloud upload, including capacity, provisioning, load balancing, scaling and application health monitoring.

There are multiple ways we can deploy web applications(source code) using Elastic Beanstalk.

1. Using console management.
2. Command Line Interface (CLI). – need to download on local machine.
3. API.

**AMI** stands for **Amazon Machine Image**.

* Is a ***template contains*** the **software configuration**( operating system, application server and application) required to ***launch instance***.

**IAM** stands for **Identity** and **Access Management**

* Enables us to manage access to AWE services and resources securely.
* Using IAM, we can create and manage AWS users and groups and use permissions to allow and deny their access to AWS resources.

**PuTTY** stands for PU(Public Encryption) + TTY(Teletype).

PuTTY ( software) generally has two purposes.

1.Used as a File Transfer Protocol.

2.Used to generate Hash key.

* In simple terms, if we want to connect and execute commands on a remote Linux/Unix server, we have to use PuTTY software which is installed on Windows.

For example, if we want to connect remote Windows machine we use Remote Desktop Connection (RDP), same way we want to connect to Linux server from Windows machine, we use PuTTY.

* Is terminal emulator application which act as a client for the SSH, Telnet, rlogin and raw TCP computing protocols and as a serial console client.
* PuTTY works by sending typed commands and receiving test responses over tcp/ip socket like a traditional terminal(TTY), but is used secure socket (SSH) with public ley encryption wrapping the packet payloads.
* Here we use for converting .pem file to .ppk file.