**Cloud Computing**

* On demand IT services with pay as you go pricing instead of owing, buying and maintaining services.
* There are many companies using this pertaining to many use cases –
  + Data backup
  + Disaster recovery
  + Email
  + Virtual Desktops
  + Software Development and Testing
  + Big Data Analytics
  + Real time fraud detection
  + Online games
  + Scalability
* Deploy app to multiple locations in a click

**AWS**

* Become agile and innovate faster.
* On demand delivery of tech services via the internet with pay as you go pricing.
* To build and run virtually any type of app without upfront cost or going commitments.
* Only pay for what you use.
* Provides a lot of features compared to any other provider.
* Faster, Easier and more cost effective to move existing apps to the cloud.
* We can build anything :
  + Infrastructure technologies like compute, storage and database
  + Emerging tech such as AI, ML
  + Data Analytics
  + Internet of Things (IoT)
* Highly Secure

**Top AWS Services**

1. **EC2 – Elastic Cloud Compute**
   1. EC2 is a cloud platform provided by Amazon that offers secure, and resizable compute capacity.
   2. Its purpose is to enable easy access and usability to developers for web-scale cloud computing, while allowing for total control of your compute resources.
   3. Deploy applications rapidly without the need for investing in hardware upfront; all the while able to launch virtual servers as-needed and at scale.
2. **RDS – Relational Database Services**
   1. Amazon Relational Database Service (Amazon RDS) makes database configuration, management, and scaling easy in the cloud.
   2. Automate tedious tasks such as hardware provisioning, database arrangement, patching, and backups – cost-effectively and proportionate to your needs.
   3. RDS is available on various database instances which are optimized for performance and memory, providing six familiar database engines including Amazon Aurora, PostgreSQL, MySQL, MariaDB, Oracle. database, and SQL server.
3. **S3 – Simple Storgae Services**
   1. Amazon S3, at its core, facilitates object storage, providing leading scalability, data availability, security, and performance. Businesses of vast sizes can leverage S3 for storage and protect large sums of data for various use cases, such as websites, applications, backup, and more.
   2. Amazon S3’s intuitive management features enable the frictionless organization of data and configurable access controls.
4. **Lambda**
   1. Lambda permits you to run code without owning or managing servers. Users only pay for the compute time consumed.
   2. Operate code for nearly any application or backend utility without administration. Users just upload the code, and Lambda does the rest, which provides precise software scaling and extensive availability.
5. **SNS – Simple Notification Service**
   1. Amazon SNS is a fully managed messaging solution that provides low-cost infrastructure for bulk message delivery, primarily to mobile users.
   2. Users can chat directly with customers through system-to-system or app-to-person communication between decoupled microservice apps.
6. **IAM – Identity and Access Management**
   1. AWS Identity and Access Management provides secure access and management of resources in a secure and compliant manner. By leveraging IAM, you can create and manage users and groups by allowing and denying their permissions for individual resources.
   2. There are no additional costs, people only get charged for the use of other services by their users.

**And many many more … https://aws.amazon.com/**