Assignment 6:

1.AWS Architecture :

**LOAD BALANCER :**

A load balancer accepts incoming traffic from clients and routes requests to its registered targets (such as EC2 instances) in one or more Availability Zones.

* The load balancer also monitors the health of its registered targets and ensures that it routes traffic only to healthy targets.
* Modern applications must process millions of users simultaneously and return the correct text, videos, images, and other data to each user in a fast and reliable manner.
* 3 Types of load balancers in AWS : Aplication load balancer

Network load balancer

Application LB and network LB considerations

**ELASTIC COMPUTE CLOUD (EC2):**

Amazon Elastic Compute Cloud (Amazon 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.

Using Amazon EC2 reduces hardware costs so you can develop and deploy applications faster. You can use Amazon EC2 to launch as many or as few virtual servers as you need, configure security and networking, and manage storage.

**There are different types of EC2 Instances:**

* General Purpose Instances.
* Compute Optimized Instances.
* Memory-Optimized Instances.
* Accelerated Computing Instances.
* Storage Optimized Instances.

**RELATIONAL DATABASE SERVICE:**

Amazon Relational Database Service (Amazon RDS) is a web service that makes it easier to set up, operate, and scale a relational database in the AWS Cloud. It provides cost-efficient, resizable capacity for an industry-standard relational database and manages common database administration tasks.

Amazon RDS allows you to encrypt your databases using keys you manage through AWS Key Management Service (KMS). On a database instance running with Amazon RDS encryption, data stored at rest in the underlying storage is encrypted, as are its automated backups, read replicas, and snapshots.

AWS RDS Instance Types have three major categories: general-purpose,

memory-optimized,

burstable performance.