MODULE 10: Automatic Scaling and Monitoring

1. Elastic load balancing:

- It distributes incoming application or network traffic across multiple targets in single az or across multiple azs.
- It scales your load balancer as traffic to your application changes overtime.

Types of ELB:

- Application load balancer
- Network load balancer
- Classic load balancer

Use cases:

- High availability and fault tolerant application
- Containerised application
- Elasticity and scalability
- VPC
- Hybrid environments
- Invoke lambda over http/https

AWS monitoring:

- Access logs
- Cloudwatch metrics
- Cloud trail logs

2. Cloudwatch

- Monitor
- Collect and tracks
- Alarms, event
- It create alarm based on : static threshold, anomaly detection, metric maths expression

3. Auto Scaling

- Helps to maintain application availability
- Auto scaling group is a collection of ec2 instances that are treated as a logical grouping for the purpose of automated scaling and management.
- Scale out: launch instance
- Scale in : terminate instance
- It monitors your application and automatically adjusts capacity to maintain steady predictable performance at the lower possible cost.