AUTO SCALING IN AWS :

automatically adjusts no of compute resources

Compute resources :.EC2, S3

Optimize performance

Cost efficiency

KEY COMPONENTS OF AUTOSCALING :

1. **ASG (AUTO SCALING GROUPS) : define the capacity of instance**
2. **LAUNCH CONF / LAUNCH TEMPLATES : newly launched Z instance automatically got conf within ASG**
3. **SCALING POLICIES : AWS ENV =INSIDE + OUTSIDE , DEFINE THE RULES FOR SCALING IN OR OUT. EX : CPU USAGE, CUSTOM METRICS**
4. **HEALTH CHECKS : ENSURING HEALTHY INSTANCES**

X, Y (SET UP CONF IN PAST ON WORKING)
Z

NOTE : WHEVER DEMAND INCREASING -> AUTOMATICALLY ADD ADDITIONAL INSTANCES. IT WORKS REVERSELY TOO

LOAD BALANCER IN AWS

AWS SERVICE

TYPE OF LOADBALANCER :

1. **ALB : APPLICATION LOAD BALANCER:** <mark>Operates at application layer</mark> **(layer 7) and it's best suited HTTP/HTTPS traffic. It supports host/ path bath routing.**

2. **NLB : NETWORK LOAD BALANCER : Operates at layer 4 Transport layer and it handle TCP and UDP**

3. **CLB : CLASSIC LOAD BALANCER : IT OPERATES AT BOTH TRANSPORT LAYER AS WELL AS AT APPLICATION LAYER**

1. our organization has decided to have all its workloads on the public cloud. But, due to certain security concerns, your organization decides to distribute some of the workload on private servers. You are asked to suggest a cloud architecture for your organization. What will your suggestion be?

A hybrid cloud. The hybrid cloud architecture is where an organization can use the public cloud for shared resources and the private cloud for confidential workloads.

2.Can you launch Amazon Elastic Compute Cloud (EC2) instances with predetermined private IP addresses? If yes, then with which Amazon service is it possible?

Yes. It is possible by using VPC (Virtual Private Cloud).

3.Which Amazon solution will you use if you want to accelerate moving petabytes of data in and out of AWS, using storage devices that are designed to be secure for data transfer?

Amazon Snowball. AWS Snowball is the data transport solution for large amounts of data that need to be moved into and out of AWS using physical storage devices.

4. Your organization has around 50 IAM users. Now, it wants to introduce a new policy that will affect the access permissions of an IAM user. How can it implement this without having to apply the policy at the individual user level?

ANS :
It is possible using AWS IAM groups, by adding users in the groups as per their roles and by simply applying the policy to the groups.