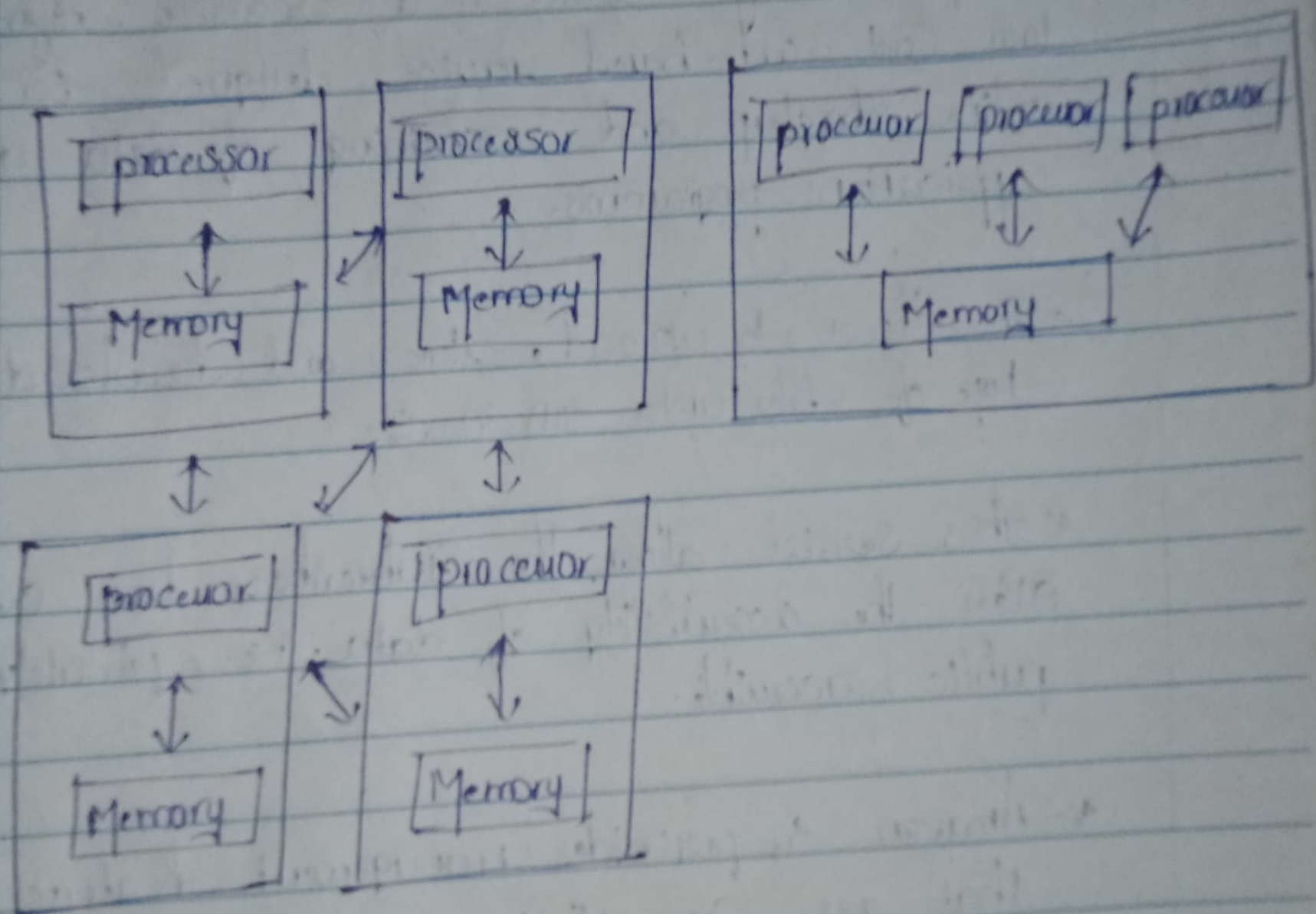


Write about parallel and distributed programming?  
 While both distributed Computing and parallel Systems are widely available these days, the main difference between these two is that a parallel Computing system consists of multiple processors that communicate with each other using a shared memory.

Distributed computing      parallel Computing



\* In parallel Computing system as the number of processor increases, with enough parallelism available in applications.

\* Single Computer is required multiple processor.

\* Uses multiple Computers multiple computer per node  
 Tomorrow's World....



- \* Improves system scalability, fault tolerance and resource sharing capabilities.

- \* parallel, distributed programming underlies software in multiple domains, ranging from biomedical research to financial services.

2) Write a note on simple storage service (S3).

- \* Simple Storage Service is a scalable, high-speed, low cost web-based service designed for online backup and archiving of data and applications programs.

- \* It allows to upload, store and download any type of files upto 5TB in size.

- \* This service allows the subscribers have control over the accessibility of data; i.e., privately / public accessible.

- \* Amazon S3 provides management features, so that you can optimize, organize and configure access to your data to meet your specific, business, organizational and compliance requirements.

- \* Storage classes -

you can store data with changing (or) unknown access patterns in S3 intelligent pricing which optimizes storage costs by



automatically moving your data between  
— four access tiers when your access patterns  
change.

\* Storage management:-

S3 has storage management features  
— that you can use to manage costs.

\* Access management:-

S3 provides features for auditing and  
managing access to your buckets and objects.

\* Storage logging and monitoring:-

Amazon S3 provides logging and  
monitoring tools that you can use to monitor and  
control how your S3 resources are being used.

\* Storage consistency:-

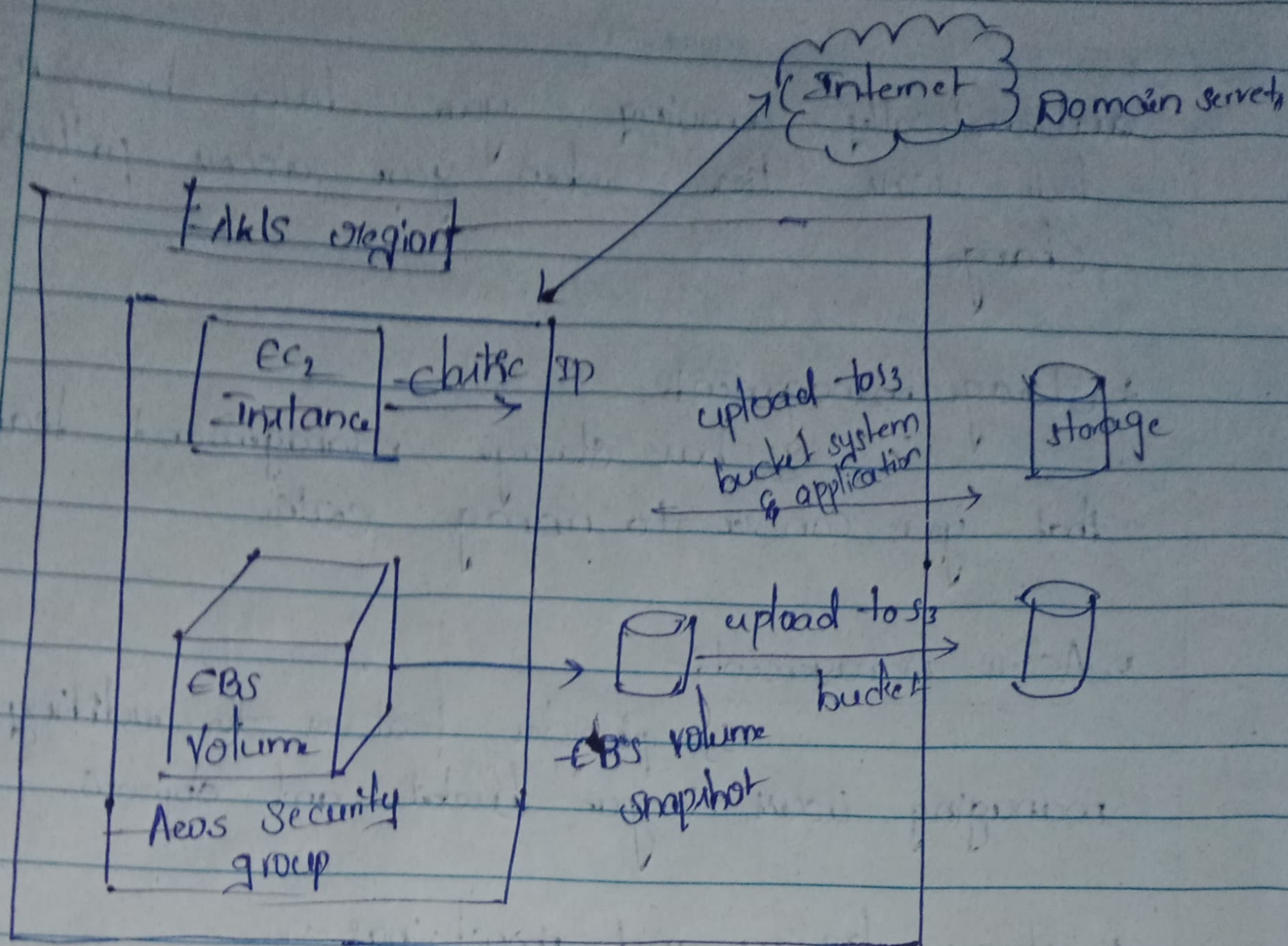
Amazon S3 provides strong read after  
write consistency for PUT and DELETE requests  
of objects in your S3 buckets in all regions.

3) Illustrate and architecture.

\* The basic architecture of AWS EC2, where  
EC2 stands for elastic compute cloud EC2  
allows users to use virtual machine of  
different configuration as per their requirements.

\* It allows various configuration, options,  
mapping of individual service, various  
pricing options etc.,





\* Load balancing - It simply means to hardware (or) software load over web servers.

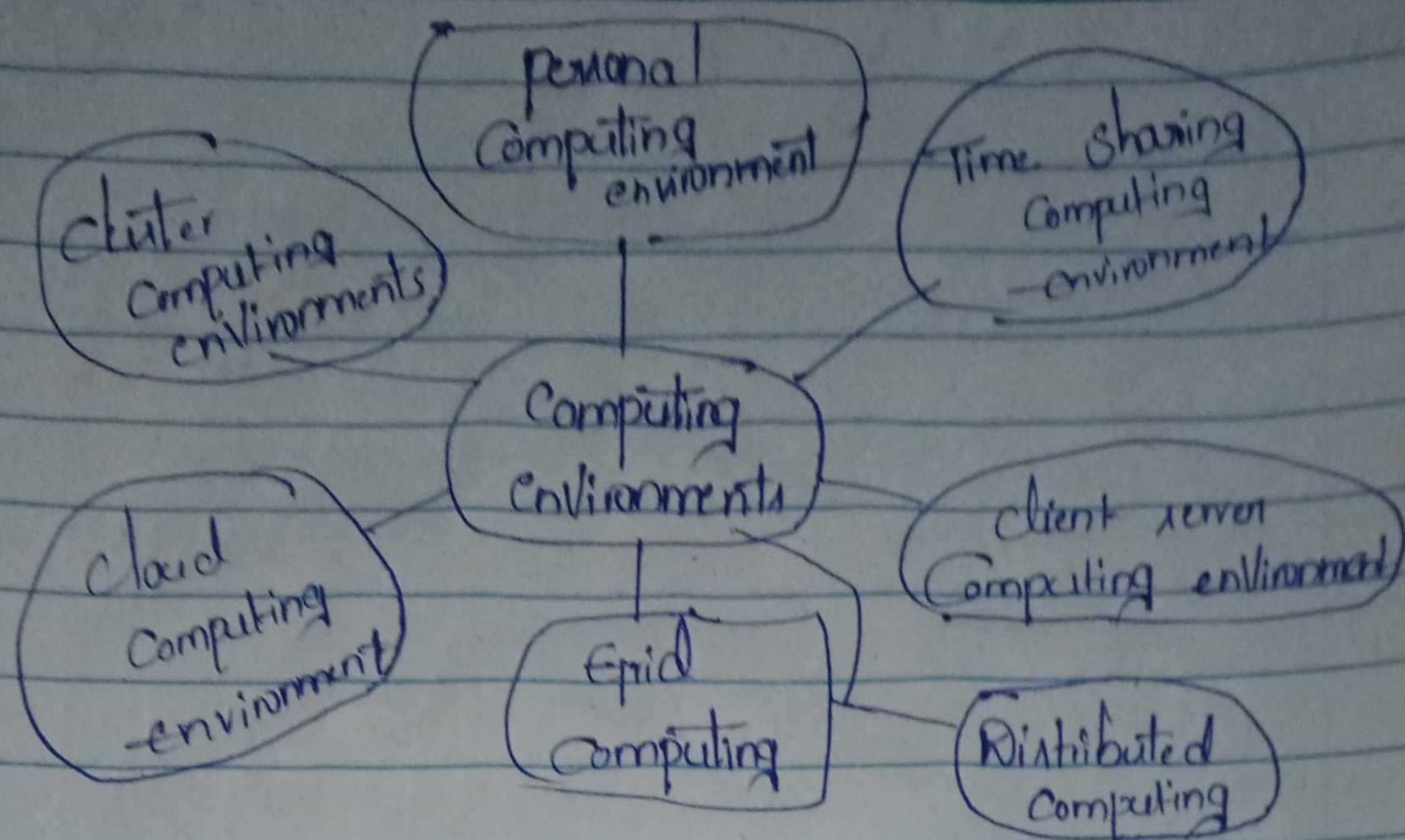
\* Elastic load balancing - It can dynamically grow and shrink the load-balancing capacity to adjust to traffic demands.

\* Security management - It provides a feature called Security groups, which is similar to an inbound network firewall.

Describe software environments?

Based on the organisation of different computer devices and communication processes, there exists multiple types of computing environments.





1) Personal Computing environments - In personal computing environment there is a stand-alone machine complete program resides on Computer.

2) Time-sharing Computings -

In time sharing Computing Environment multiple users share system simultaneously.

3) Client-server Computing environments -

In client server Computing two machines are involved.

4) Distributed Computings -

In a distributed Computing environment multiple nodes are connected together.

5) Grid Computing environments -

Here, multiple Computers from different locations work on single problem.

6) Cloud Computing environments - It demands on availability of computer system resources.