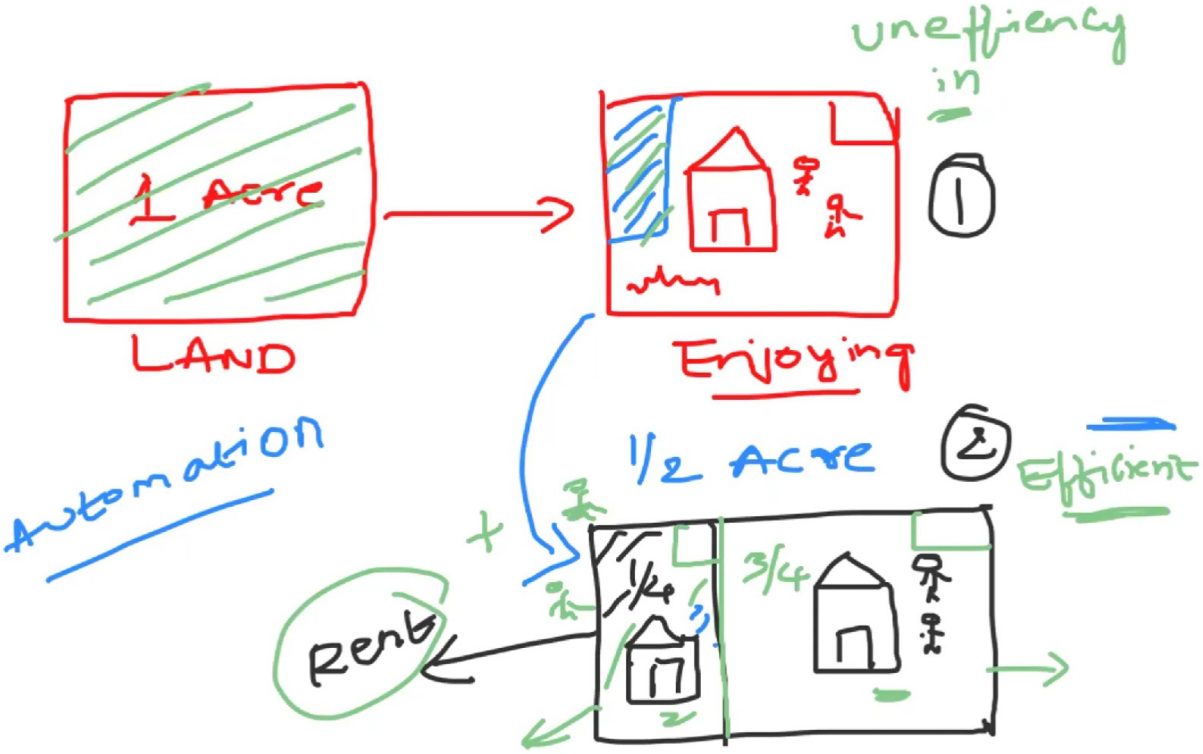
Day 3 - What is Virtual Machine ?

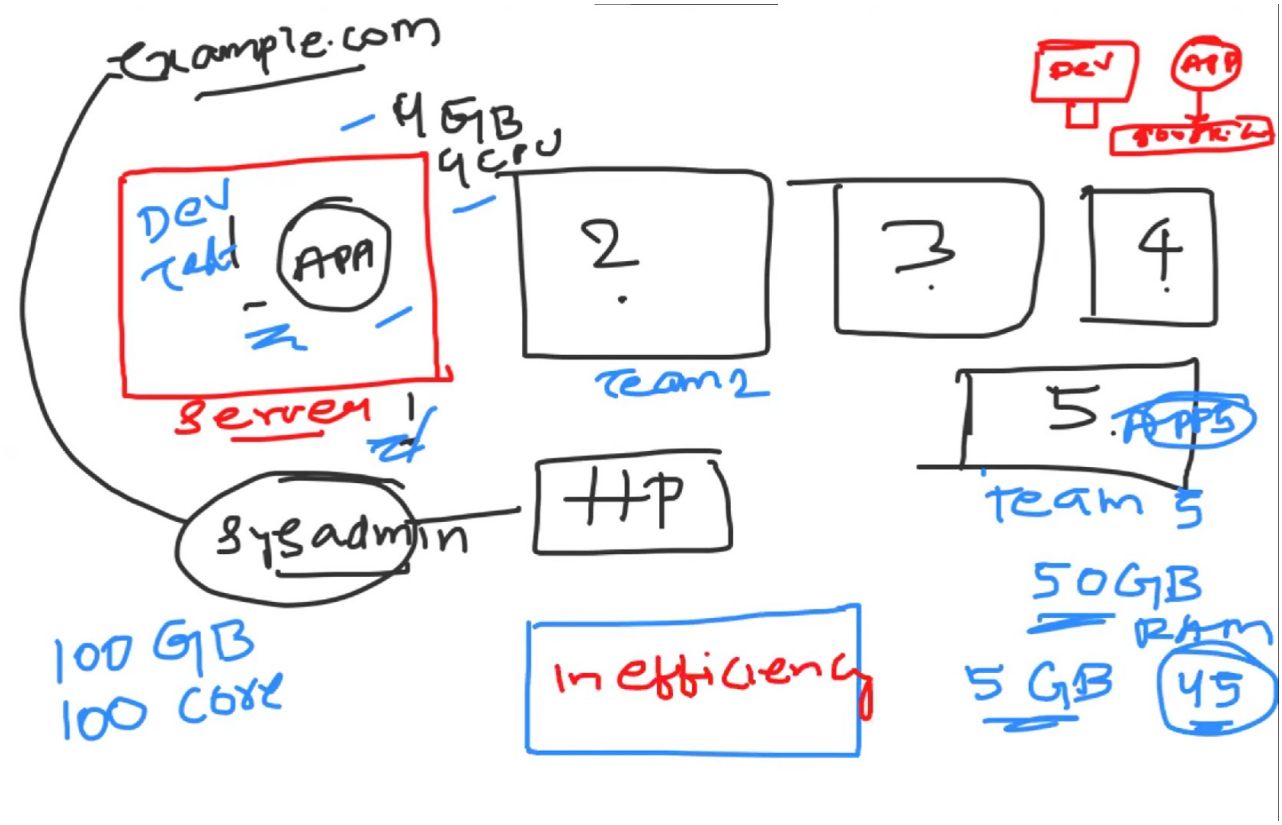
• In its simplest form, a virtual machine, or VM, is a digitized version of a physical computer. Virtual machines can run programs and operating systems, store data, connect to networks, and do other computing functions. However, a VM uses entirely virtual resources instead of physical components.



What is a Server ?

• to deploy an application, to delivery that application to client / public we need server.

• for example : Example.com brought 5 different servers from vender

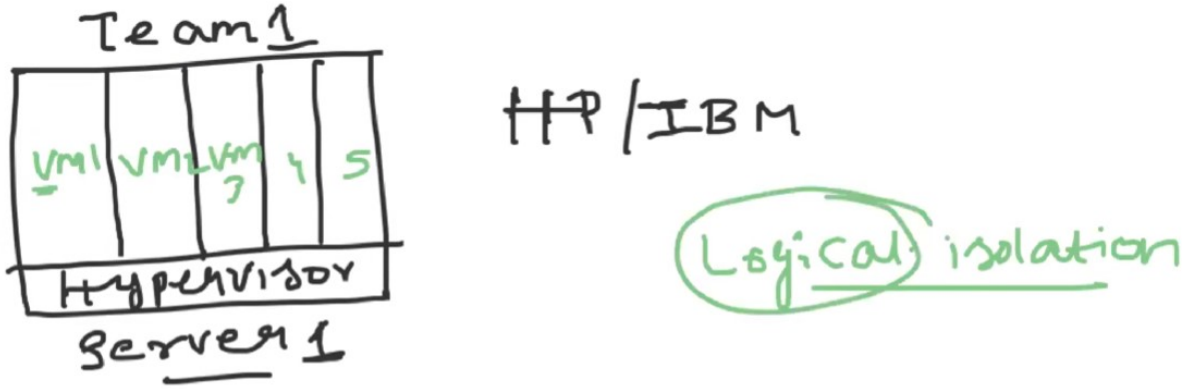


• An devops engineer or Sys Admin at example.com brought servers, they deployed in APP-1, which requires 4GB RAM. 4CPU's but the server capacity is 100GB & 100 Core. where we are wasting the resources.

• lets imagine,other 4 servers are given to 4 teams respectively, even though according to there requirements lot of system features are useless. which comes under inefficent

to sort this, we came up with Virtualization !

• In Virtualization, we can divide one server into several logical servers. by installing an software called Hypervisor. where we can install it either Bare Metal(Cloud) or On-Premises (Physical Servers)



• **weren't breaking physically, logically partitioning the server into several servers. also known as Logical Isolation**

• **The Hypervised part of the server is called as Virtual Machine**

• **The Virtual Machines in AWS Cloud is called as EC2 Instance**

Example : VMware, Xen