chapter 4

**Process: virtualization**

-What virtualization does is take that single CPU and make it look like many virtual CPUs to the applications running on the system.

-Thus, while each application thinks it has its own CPU to use, there is really only one.

Process:

-an instance of running program

-program in execution

-entity that can be assigned to, and execute on, processor

Execution context :

-it is the **internal data** by which the OS is able to supervise and control the process

-includes information such as the priority of the process and whether the process is waiting for the completion of a particular I/O even -includes the contents of the various processor registers

Process can 3 components:

-an executable program

-associated data needed by program( variable, work space, buffer)

-execution context (process state) of virtual CPu( program)

Execution context :

-it is the **internal data** by which the OS is able to supervise and control the process

-includes the contents of the various processor registers

How to provide illusion of many CPU