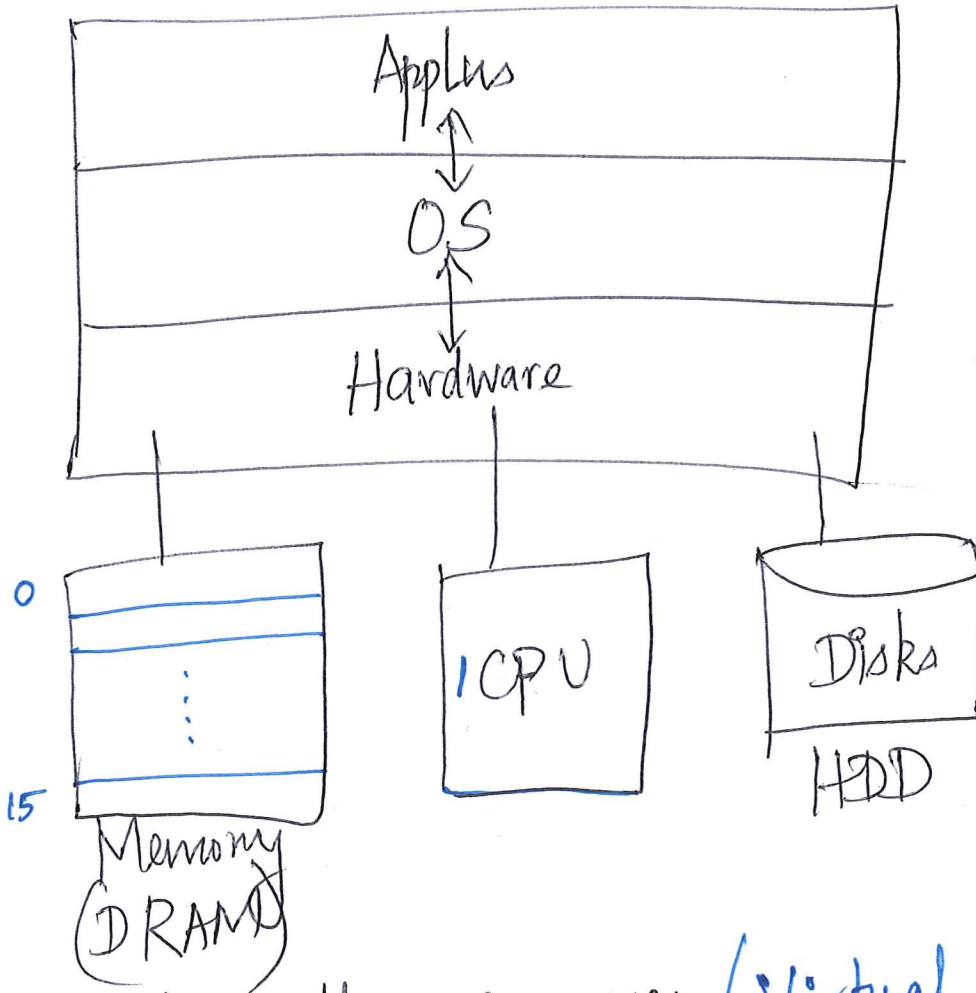
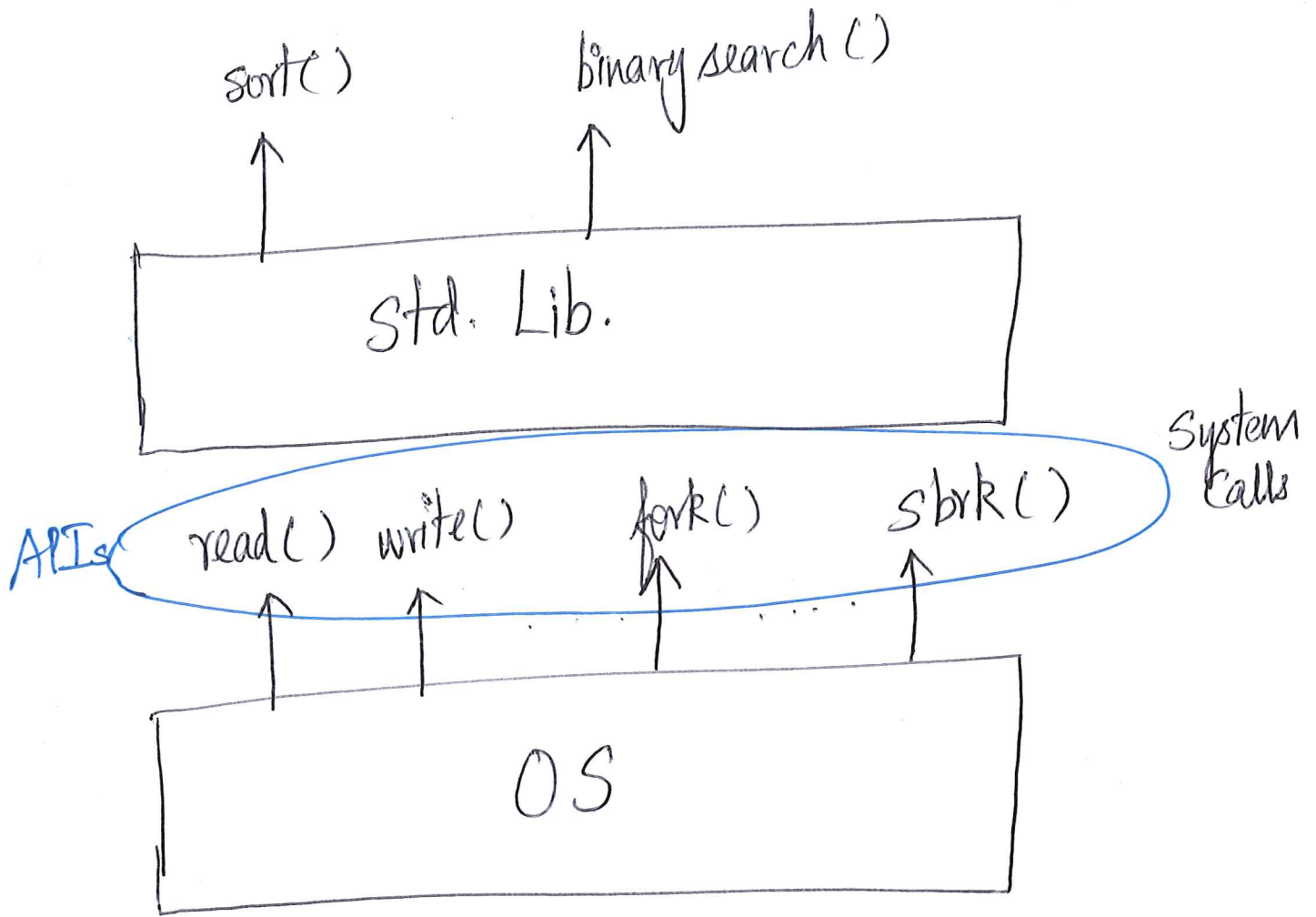


Operating System

1. Resources Manager.
2. Control program.
3. Interface to H/W.



1. Virtualize the resources (Virtual Machine).
2. Std. Lib. to apps.
3. Resource Manager.



Course

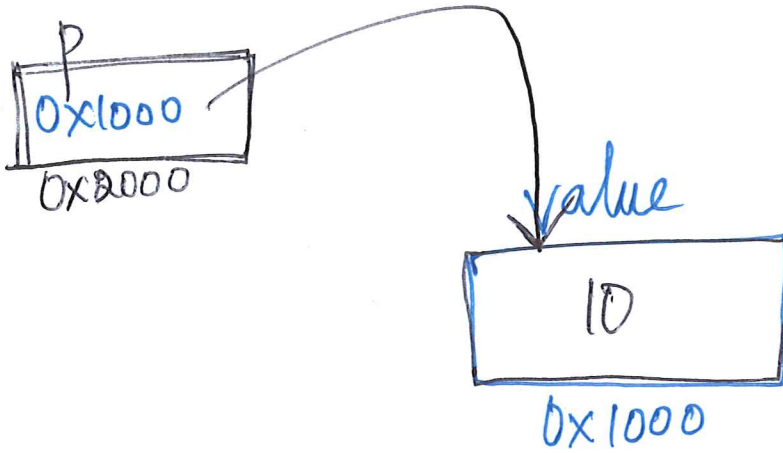
1. Virtualization { CPU
Memory

2. Concurrency (Threads!)

3. Persistence.



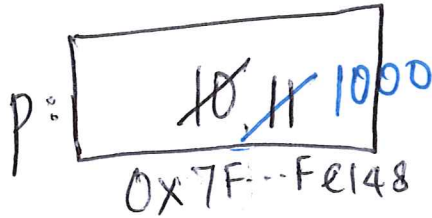
- Thread 1 - accept connections
- Thread 2 - do processing for 1 client
- ...
- Thread n - n



$\%mem$ 10

mem 10

mem 1000



11

12

13

⋮

⋮

⋮

⋮

⋮

⋮

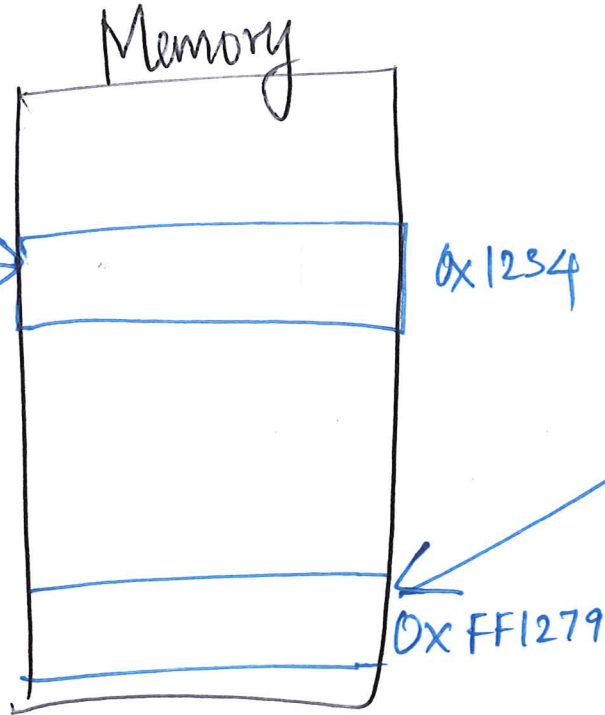
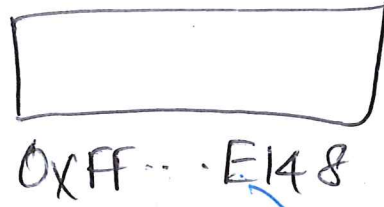
⋮

1001
1002
⋮
⋮
⋮
⋮

mem-10

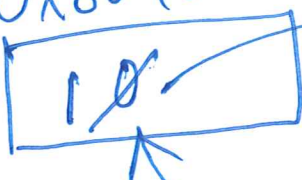


mem 1000

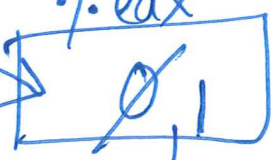


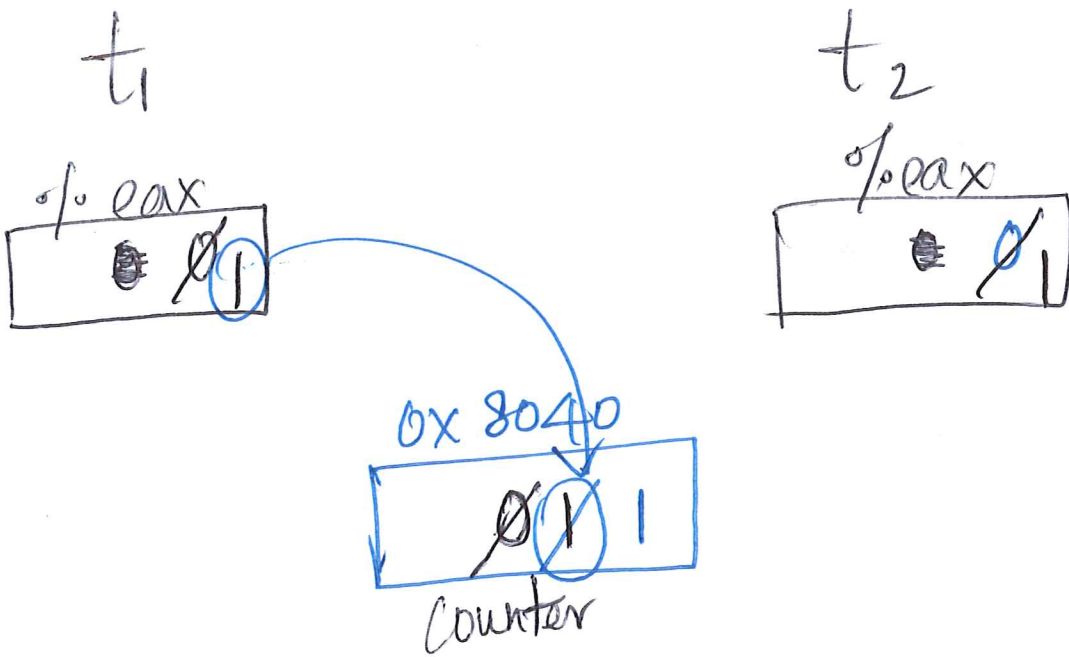
(counter)

0x8040..



%.eax

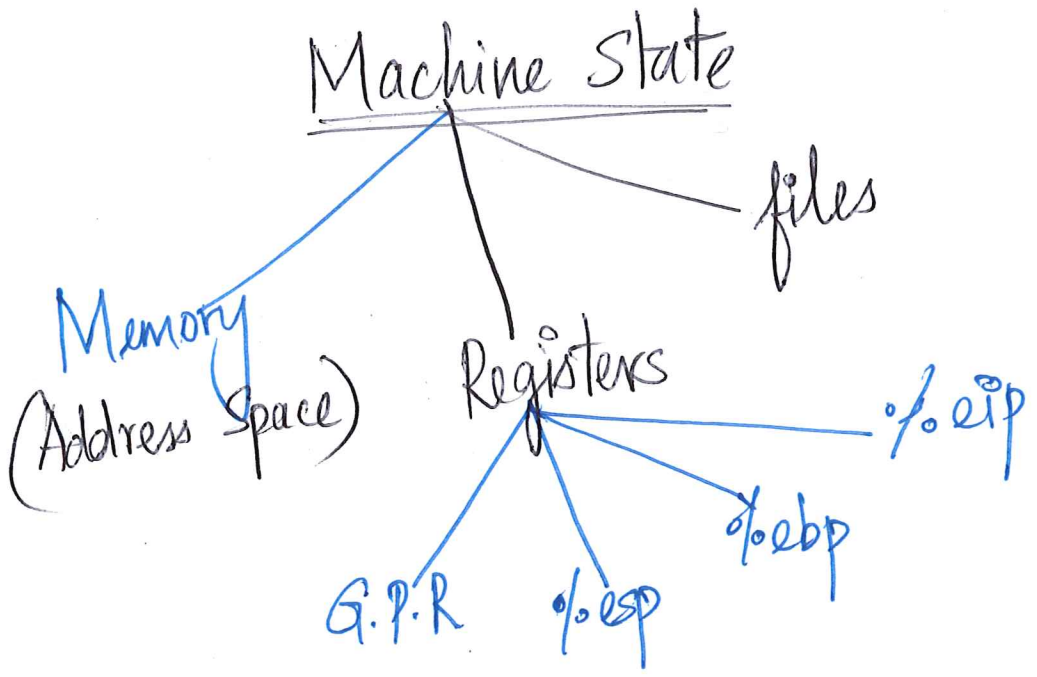
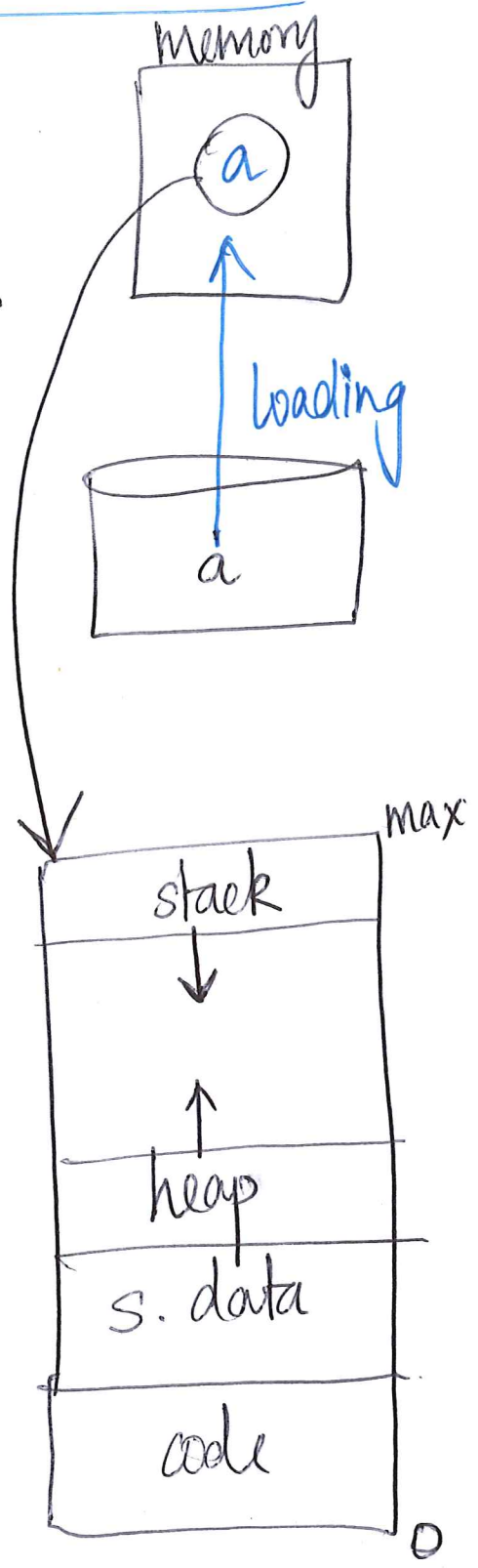
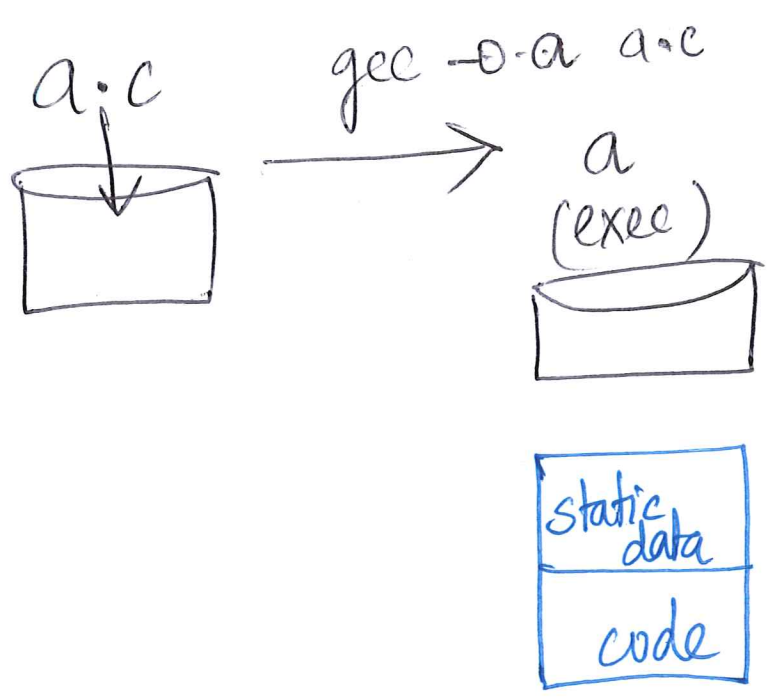




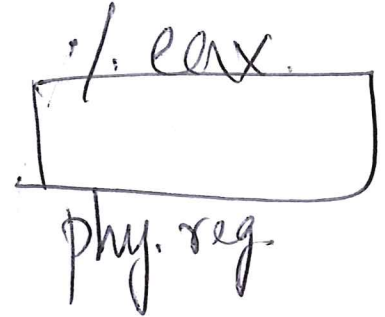
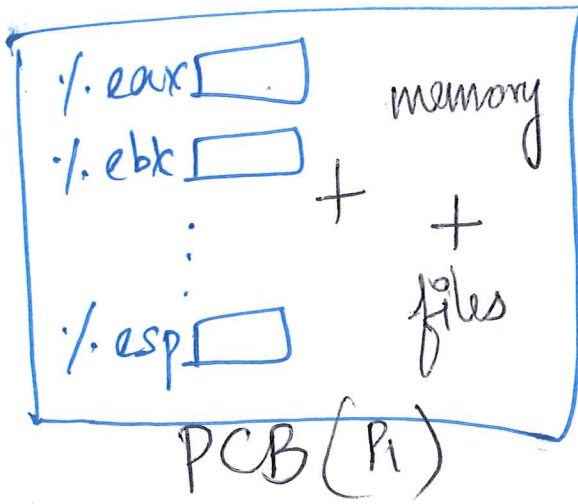
t_1	t_2
<code>mov 0x8040, %eax</code> <code>add \$0x1, %eax</code>	<code>mov 0x8040, %eax.</code> <code>add \$0x1, %eax</code> <code>mov %eax, 0x8040</code>
<code>mov %eax, 0x8046</code>	

CPU Virtualization

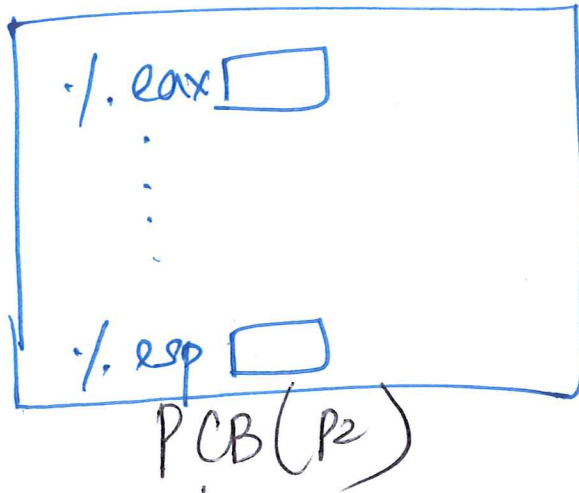
Process - a program in execution.



P₁



P₂



↓
Process Control Block

struct

proc {



⋮

};

