

## Assignment #1

OS Lab

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Q1. CPU CORES : 2

Total memory : 2007822 KB

Free Memory Fraction : around (3/4)

context switches : ctext 2976454

processes has it forked since booting : 14920 times

Q2. bottleneck resource of process : command run ( run code and top)

For all the four program given the bottleneck for all is :-----CPU

Q3.	program	User	kernel
	cpu	2126	0
	cpu-print	135	577

./cpu take more time in user mode but cpu-print take more in kernel mode

Q4. cpu voluntary\_ctxt\_switches: 2 nonvoluntary\_ctxt\_switches: 6822  
disk voluntary\_ctxt\_switches: 24316 nonvoluntary\_ctxt\_switches: 4232  
reason:: in cpu no i/o use but in disk i/o used

Q5. Pid : 1480

command used : pstree

Q6. ./cpu-print > /tmp/tmp.txt &----- descriptor information

pid : 2148

lrwx----- 1 root root 64 Jan 16 11:02 0 -> /dev/pts/1

l-wx----- 1 root root 64 Jan 16 11:02 1 -> /root/Downloads/tmp.txt

lrwx----- 1 root root 64 Jan 16 11:02 2 -> /dev/pts/1

Q7. ./cpu-print > /tmp/tmp.txt &-- descriptor information

lrwx----- 1 root root 64 Jan 16 11:15 0 -> /dev/pts/1

l-wx----- 1 root root 64 Jan 16 11:15 1 -> pipe:[16596]

lrwx----- 1 root root 64 Jan 16 11:15 2 -> /dev/pts/1

