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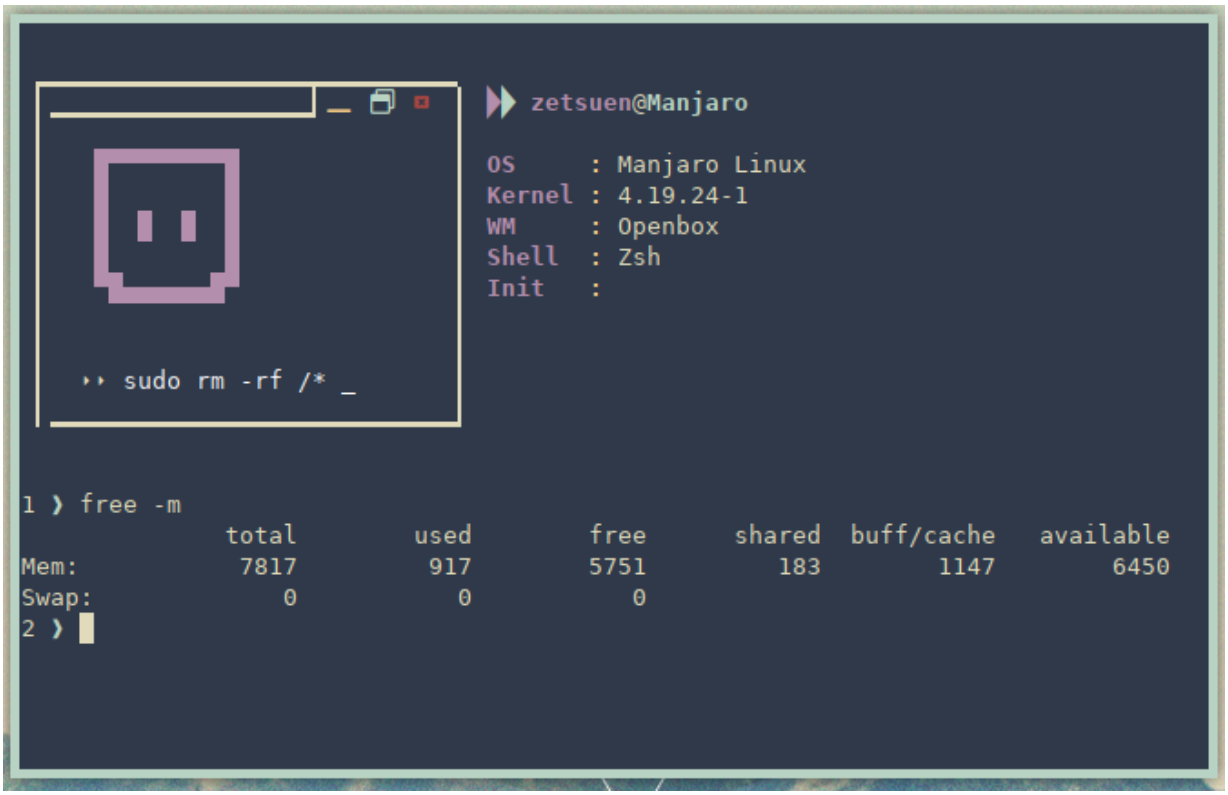
Memory Management

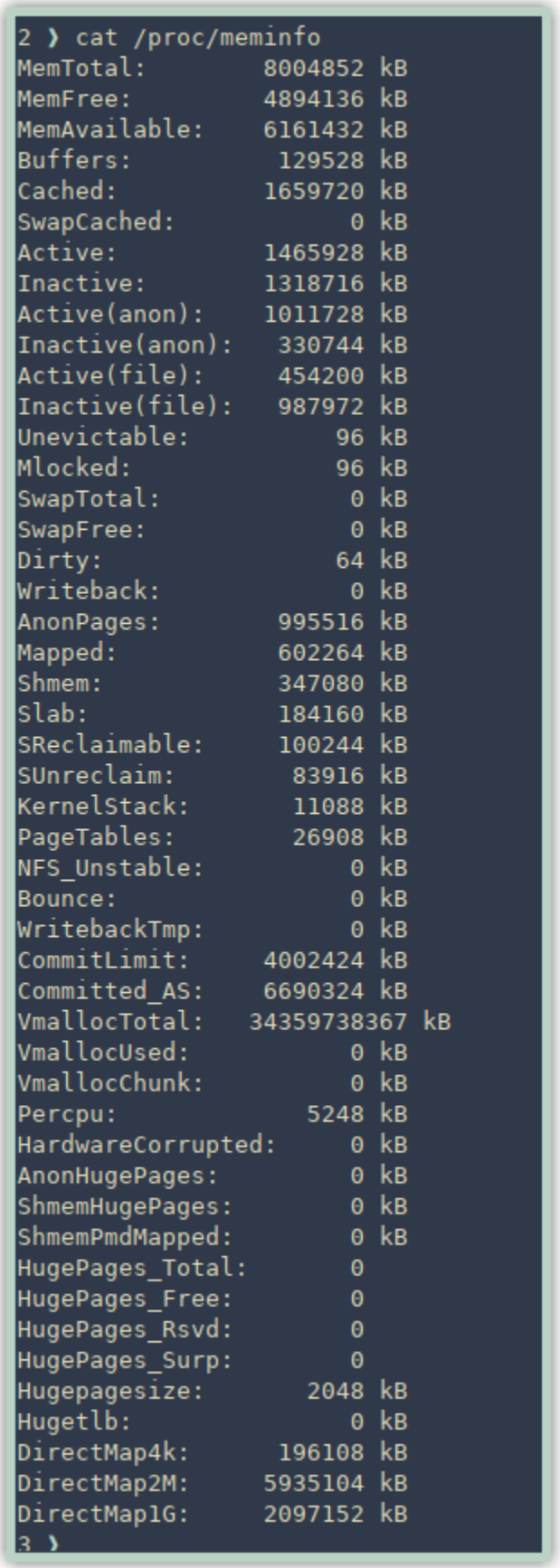
1. free -m

the free command is used to show total amount of free and used physical memory, total amount of swap memory In the system and display buffers and caches used by kernel. And -m command is used to display size in megabyte. here's the example of this command



2. /proc/meminfo/

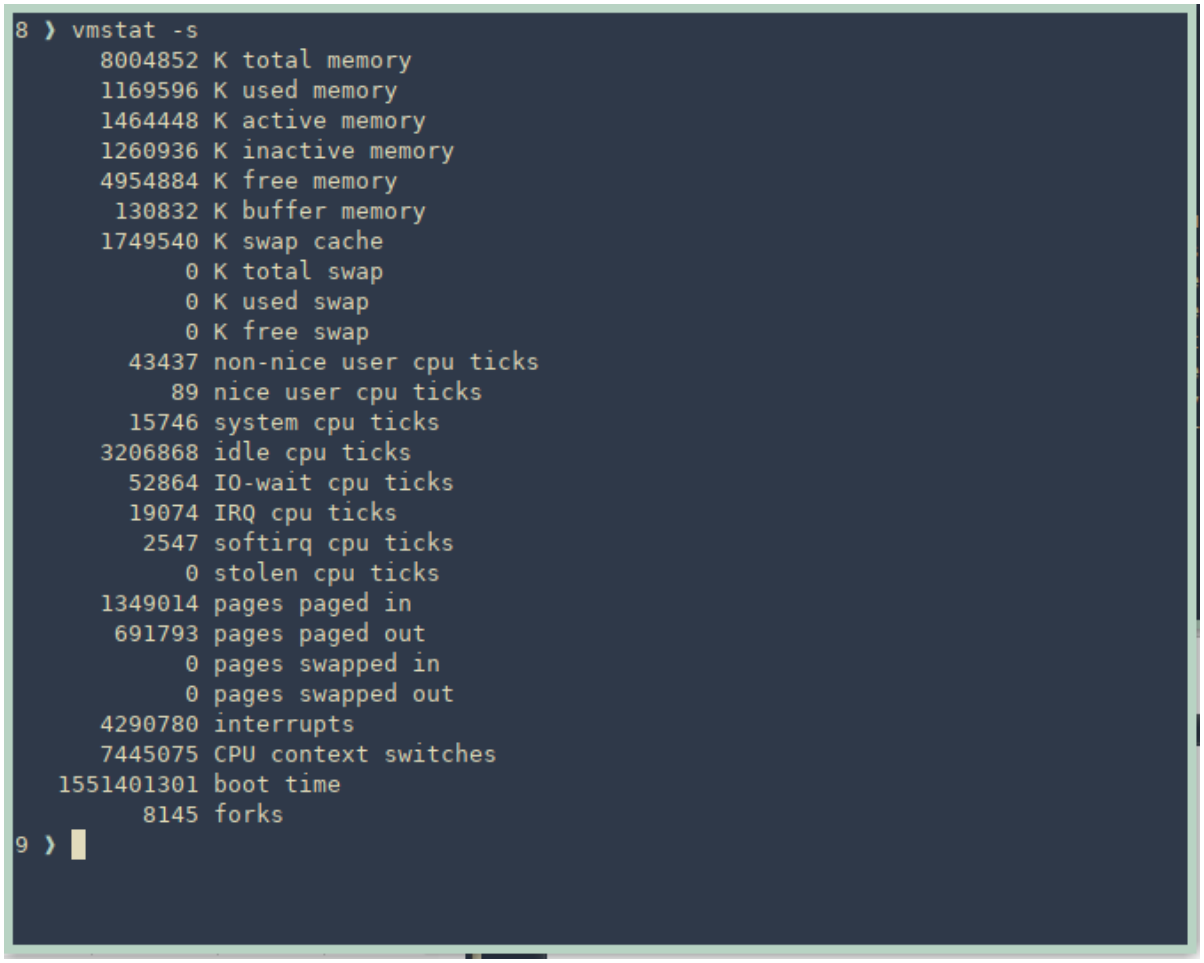
we can check memory usage by reading meminfo file with cat /proc/meminfo/. here's example of this command



```
2 ❯ cat /proc/meminfo
MemTotal:        8004852 kB
MemFree:         4894136 kB
MemAvailable:    6161432 kB
Buffers:          129528 kB
Cached:          1659720 kB
SwapCached:            0 kB
Active:          1465928 kB
Inactive:        1318716 kB
Active(anon):    1011728 kB
Inactive(anon):   330744 kB
Active(file):     454200 kB
Inactive(file):   987972 kB
Unevictable:          96 kB
Mlocked:              96 kB
SwapTotal:             0 kB
SwapFree:              0 kB
Dirty:                64 kB
Writeback:             0 kB
AnonPages:        995516 kB
Mapped:           602264 kB
Shmem:            347080 kB
Slab:             184160 kB
SReclaimable:     100244 kB
SUnreclaim:        83916 kB
KernelStack:       11088 kB
PageTables:        26908 kB
NFS_Unstable:          0 kB
Bounce:                0 kB
WritebackTmp:          0 kB
CommitLimit:     4002424 kB
Committed_AS:    6690324 kB
VmallocTotal:   34359738367 kB
VmallocUsed:           0 kB
VmallocChunk:          0 kB
Percpu:             5248 kB
HardwareCorrupted:     0 kB
AnonHugePages:         0 kB
ShmemHugePages:        0 kB
ShmemPmdMapped:        0 kB
HugePages_Total:       0
HugePages_Free:        0
HugePages_Rsvd:        0
HugePages_Surp:        0
Hugepagesize:       2048 kB
Hugetlb:               0 kB
DirectMap4k:      196108 kB
DirectMap2M:     5935104 kB
DirectMap1G:     2097152 kB
3 ❯
```

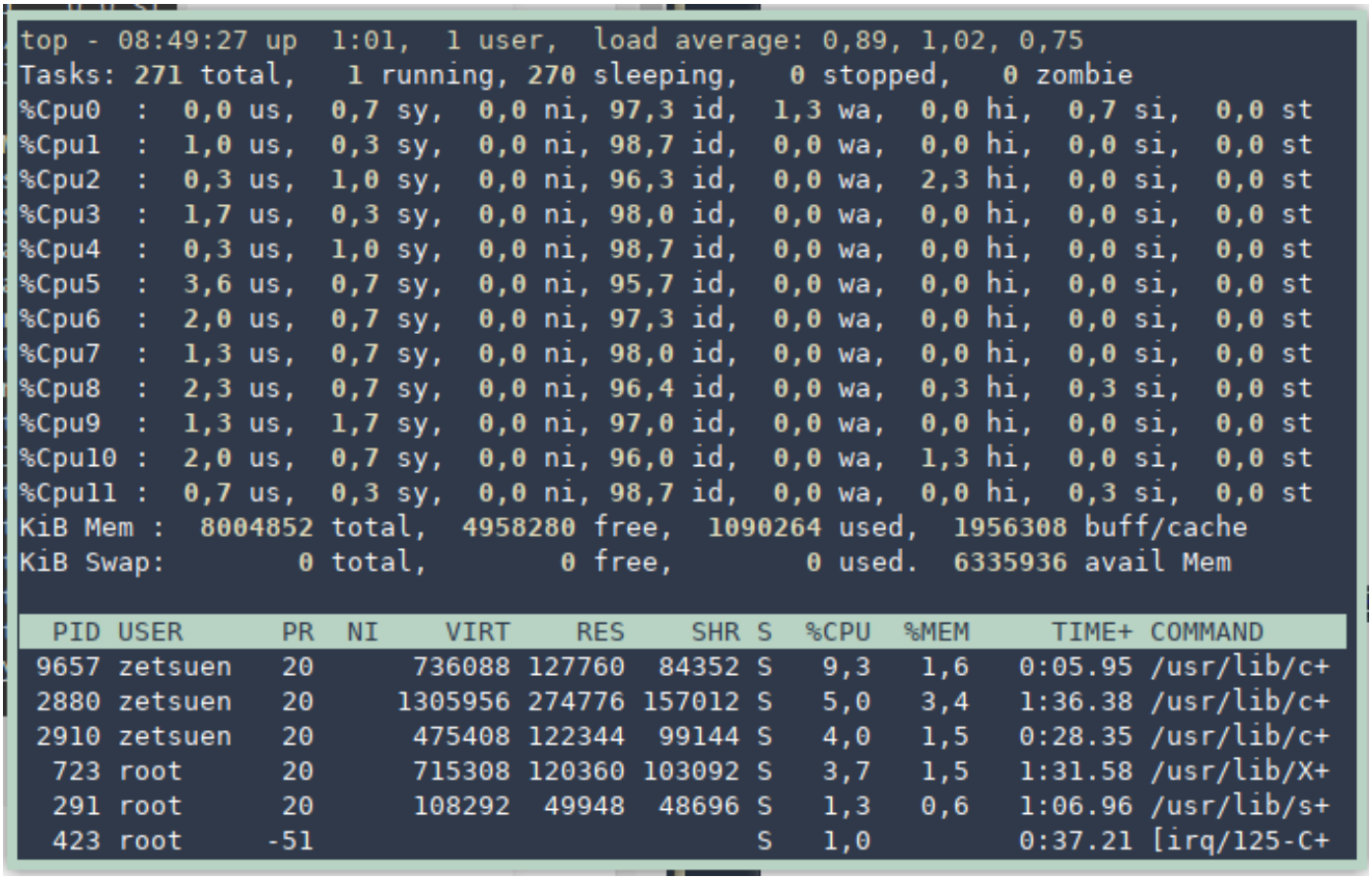
3. vmstat -s

vmstat command with -s option is used to display the memory usage statistic much like the above command. here's the example for this command



4. Top

Top command is task manager alike application to show not only memory usage but also display cpu usage and program that running in the background. here's the example



5. htop

htop command is almost the same as top command but htop is more comperhensive compared to top. here's the example of this command