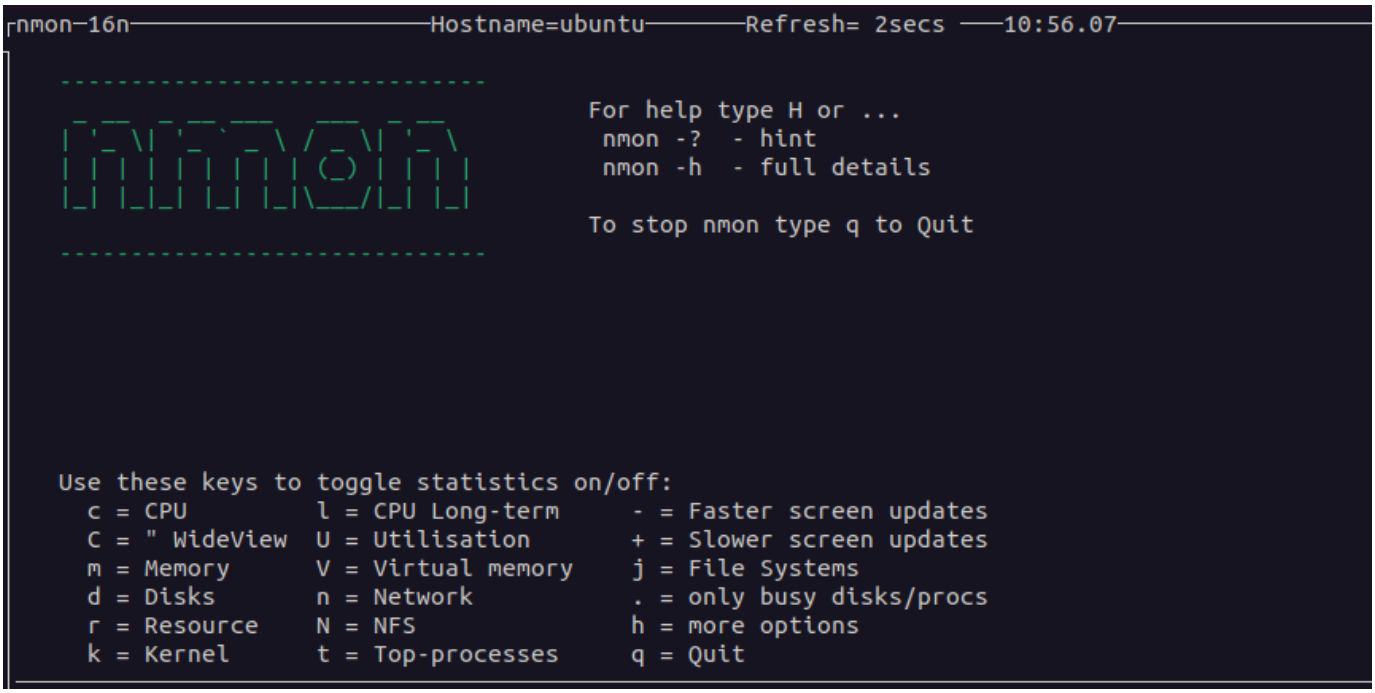
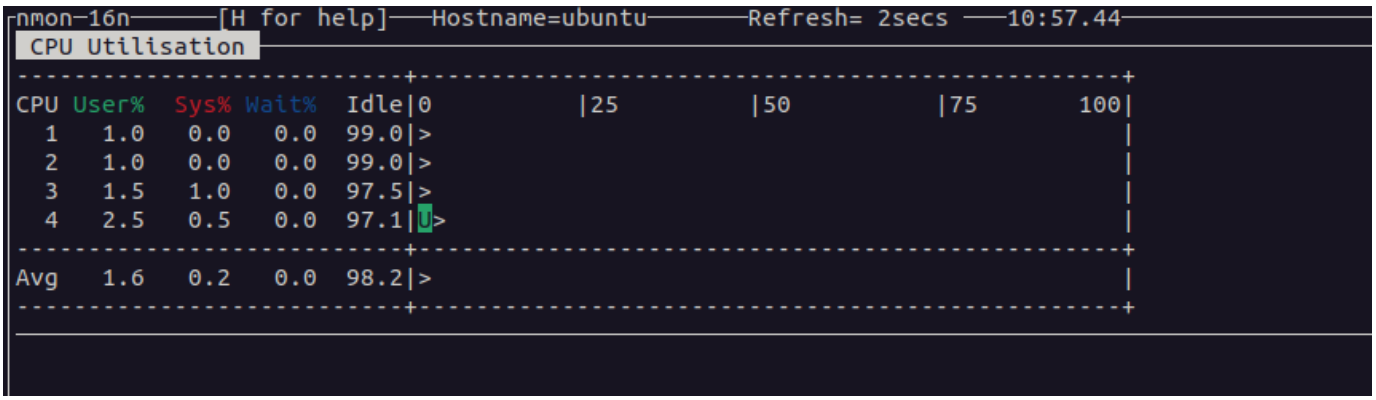
Experiment 8 : Automation of system task

Nmon – CPU Monitoring tool

Interactive command-line monitoring tool for CPU, memory, disks, network, NFS, and virtual memory utilization. To view the top process (by utilization), you can execute nmon and press enter



Type c



Type n

```
Network I/O
I/F Name Recv=KB/s Trans=KB/s packin packout insize outsize Peak->Recv Trans
     lo      0.0       0.0       0.0    0.0     0.0     0.0        0.2      0.2
 enp0s3      0.0       0.0       0.0    0.0     0.0     0.0        0.1      0.4
```

Type d

```
nmon-16n------[H for help]---Hostname=ubuntu------Refresh= 2secs ---11:00.58-------
 Disk I/O --/proc/diskstats----mostly in KB/s-----Warning:contains duplicates------
    |Name Busy  Read WriteKB|0          |25         |50          |75       100|
loop0       0%    0.0    0.0|>                                                  |
loop1       0%    0.0    0.0|>                                                  |
loop2       0%    0.0    0.0|>                                                  |
loop3       0%    0.0    0.0|>                                                  |
loop4       0%    0.0    0.0|>                                                  |
loop5       0%    0.0    0.0|>                                                  |
loop6       0%    0.0    0.0|>                                                  |
loop7       0%    0.0    0.0|>                                                  |
sr0         0%    0.0    0.0|>                                                  |
sda         0%    0.0    2.0|>                                                  |
sda1        0%    0.0    0.0|>                                                  |
sda2        0%    0.0    0.0|>                                                  |
sda3        0%    0.0    2.0|>                                                  |
loop8       0%    0.0    0.0|>                                                  |
loop9       0%    0.0    0.0|>                                                  |
loop10      0%    0.0    0.0|>                                                  |
loop11      0%    0.0    0.0|>                                                  |
loop12      0%    0.0    0.0|>                                                  |
loop13      0%    0.0    0.0|>                                                  |
loop14      0%    0.0    0.0|>                                                  |
loop15      0%    0.0    0.0|>disk busy not available                          |
Totals Read-MB/s=0.0      Writes-MB/s=0.0      Transfers/sec=1.0
```

Type V

```
Virtual Memory
nr_dirty    =        0 pgpgin      =        0                High Normal    DMA
nr_writeback=        0 pgpgout     =        0  alloc            0     26      0
nr_unstable =        0 pgpswpin    =        0  refill           0      0      0
nr_table_pgs=     3516 pgpswpout   =        0  steal            0      0      0
nr_mapped   =    74437 pgfree      =       26  scan_kswapd      0      0      0
slab_reclaim=    10908 pgactivate  =        0  scan_direct      0      0      0
slab_unreclm=    24428 pgdeactivate=        0
allocstall  =        0 pgfault     =      126  kswapd_steal     =      0
pageoutrun  =        0 pgmajfault  =        0  kswapd_inodesteal=      0
slabs_scanned=       0 pgrotated   =        0  pginodesteal    =      0
```

Netdata – Real time performance monitoring

Netdata is a real-time performance monitoring for system resources, applications, web servers, databases, DNS, mail, hardware sensors, and a lot more. It is open-source and getting started is easy. All the data is collected, stored, and streamed for you to visualize interactively. Data is collected every second, so you never miss anything.