Module 1: Critical Thinking

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CSC 507

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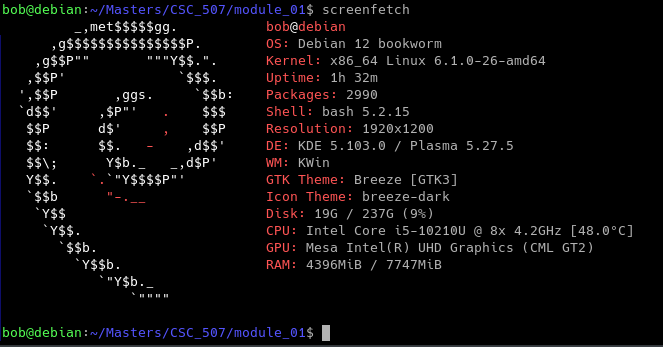
13 October 2024

Introduction

Various linux terminal emulator or shell commands can be used to display hardware information on your linux personal computer. In this case we will be using a BASH powered linux terminal. Therefore, the commands will be BASH commands as opposed to ZSH or other terminal shell commands.

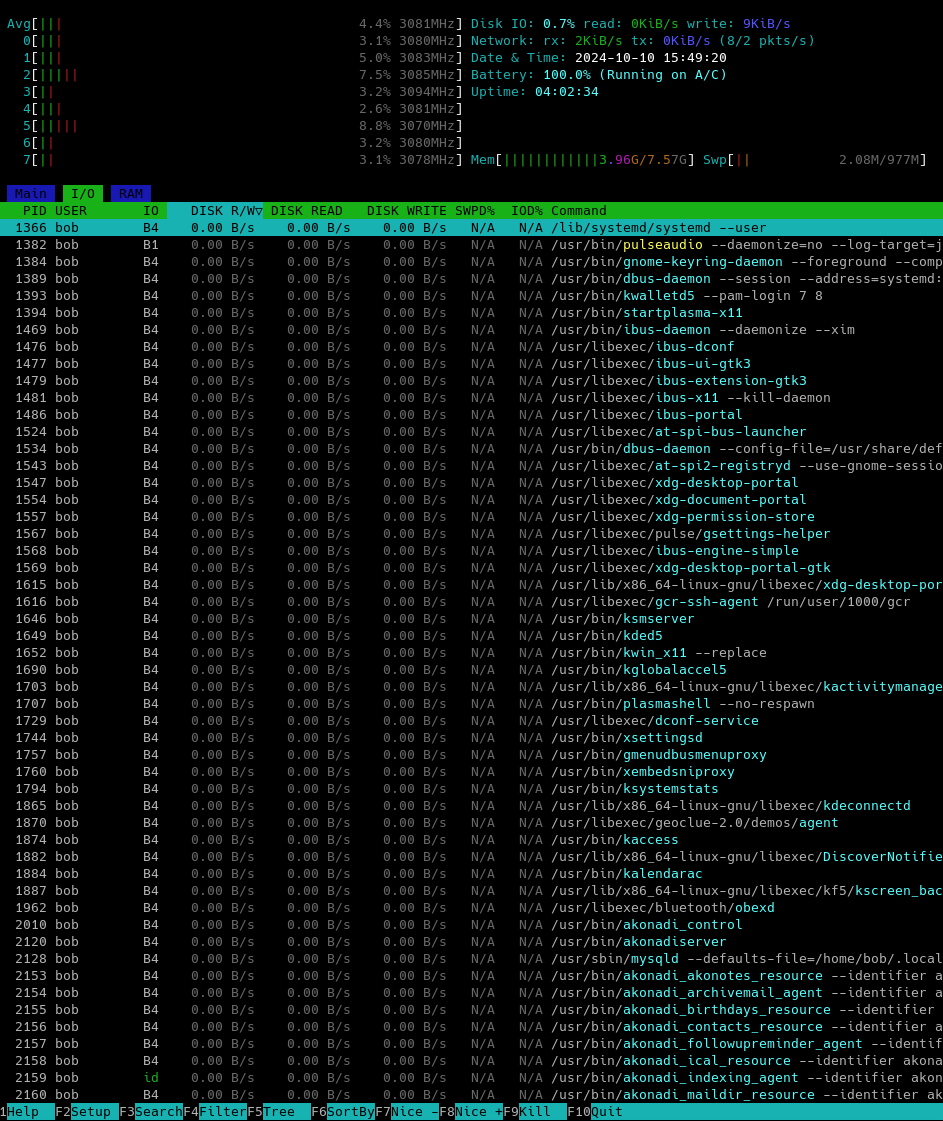
Outputs

The *screenfetch* command displays the operating system, cpu, gpu, ram, software, and some simple storage statistics.



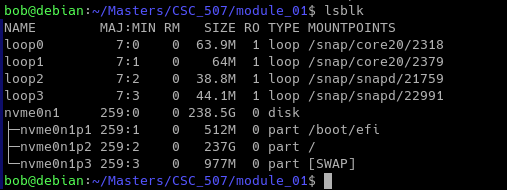
*screenfetch*

The *htop* command can be used to display informative cpu, io, general hardware/software, and ram statistics.



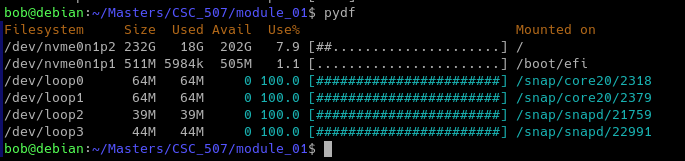
*htop*

The *lsblk* command displays an overview of storage partition statistics.



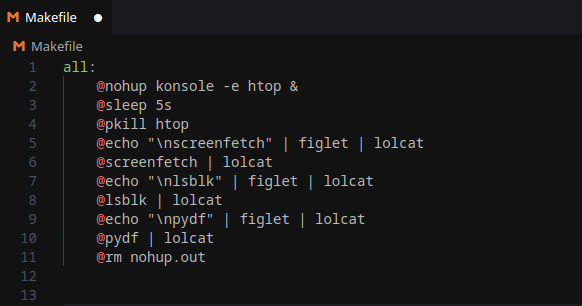
*lsblk*

### The *pydf* command is also useful for displaying a simple output of overall storage statistics.



*pydf*

Another useful tool is Make. With Make you can create a Makefile in order to automate several BASH commands with a single Makefile command. This particular Makefile automatically runs the *htop*, *screenfetch, lsblk,* and *pydf* commands. This is executed by running the command *make all,* or simply, *make.* Screenshots of the Makefile source code and its static output is displayed below.



*Makefile Source Code*



*Makefile Output*

### References

Debian Documentation Project. (2023). *Debian Reference*. Retrieved from https://www.debian.org/doc/manuals/debian-reference/

Pope, C. (2021). *The Linux Command Line: A Complete Introduction* (2nd ed.). No Starch Press.

Ramey, B. (2020). *Linux Bash Scripting Cookbook: Over 100 recipes for bash scripting, with practical examples and real-world usage*. Packt Publishing.