Unit 00_010 — Syllabus, Part 01

1. What days does this course meet? What time does it meet?

2. Why is it often handy to have two windows open while writing scripts?

3. What was the `sed` command used for in the script? (That is, what did it accomplish?)

4. What was the `wc` command used for in the script?

Unit 00_015 — More Hardware Information

5. What does each of the following do?
   - `lshw`
   - `lscpu`
   - `lsusb`
   - `lsblk`
   - `lsdev`

Unit 00_020 — Memory

6. What is RAM?

7. What is SWAP on Unix systems?
8. How many bytes in a Kilobyte?
9. How many Kilobytes in a Megabyte?
10. How many Megabytes in a Gigabyte?
11. How many Gigabytes in a Terabyte?
12. How many Terabytes in a Petabyte?

13. What is 2^{10}? Are you sick of writing it yet? (don't answer the second question!)

    Warstory: CPU speed is measured in Hertz. 1 hertz is 1 beat per second. CPU speeds used to be measured in MHz (Megahertz). The MHz kept creeping up to 800 MHz, 900MHz, and eventually hit 1000MHz. This gave advertisers a problem. Consumers had been trained to think more MHz was good. So consumer-oriented advertisements would advertise 1000MHz. But if the computer was being marketed to techies, the same system would be marketed as 1 GHz. Eventually consumers figured out that they really wanted to have one of those "Gigahertz things" on their computer.

14. One day a student brought in a new advertisement for an old computer. It was a very low price on a computer with one of those "Gigahertz things." The add said that the CPU was .8 GHz. What was the speed of this computer in MHz?

15. What is cache?

16. What does the `free` command do?

Unit 00_030 — Processes

17. What is a process?

18. Would this regular expression recognize a process id? `'^[0-9]$'`? Explain your answer.

19. What command shows processes associated with the current terminal session?

20. What command shows all processes being run by the user, even if they are not associated with this terminal?

    Comment: In the video I didn't really explain what the `nice` command does. Let's say you have a big program that might take several minutes or hours to run. You may plan to do something like take a coffee break and come back later to see the results. In that case you

might use nice to put a low priority on your process. That way other users of the system would not be slowed down.

X11 server

21. What is X-11 forwarding? Comment: The heading "Who needs X11?" should be "Who needs to install an X11 server"

    Comment The Windows 10 X11 server thing does not seem to be working. The current news is that it will be working in Windows 11. We'll see.