Some of the commands I used for Lab 1.5

* find /usr/local/cs -type d
* Q6. find /usr/local/cs -type d -newer /usr/local/cs/lib | sort | head -n 5
* Q7. find /usr/local/cs/src/python/Python-\* -type f | wc -l
* Q8. find /usr/local/cs/bin -type l | wc -l
* Q9. find /usr/lib64 -maxdepth 1 -printf '%T@ %p\n' | sort -n | head -1
* Q10. M-x apropos-command RET transpose

For Lab 1.6 I didn’t use what is default for compile, instead

* M-x compile gcc hello.c -o hello

GenAI Questions

1. How does comm work in shell command? suppose if there are two sorted files but in the middle first file misses a line that is there in the second file. what willl happen? will all be misplaced?The comm command in Unix/Linux compares two sorted files line by line and produces three columns of output:

**Column 1:** Lines only in the first file.

**Column 2:** Lines only in the second file.

**Column 3:** Lines that are common to both files.

The key point here is that comm expects both files to be sorted, so if the files are sorted but one is missing a line that the other file has, comm will still produce output in the correct format:

* The missing line will appear in **Column 2** (lines only in the second file), indicating that this line is present in the second file but not the first.
* **Column 1** will show any lines present only in the first file.
* **Column 3** will show any lines that are common to both files.

1. what does find -type do in shell?

In a shell, the command find is used to search for files and directories in a specified location based on certain criteria. The -type option is used to filter the search by the type of file you want to find.

The -type option can be followed by:

* f: Regular files (excluding directories, symlinks, etc.)
* d: Directories
* l: Symbolic links
* c: Character devices
* b: Block devices
* p: Named pipes (FIFOs)
* s: Sockets

**Example usage:**

1. **Find all regular files:**

find /path/to/search -type f

This will search for all regular files under /path/to/search.

1. **Find all directories:**

find /path/to/search -type d

This will search for all directories under /path/to/search.

1. **Find all symbolic links:**

find /path/to/search -type l

This will search for all symbolic links under /path/to/search.

Using -type helps narrow down the results based on the type of file you're looking for.

Search Engine links: <https://thehelloworldprogram.com/linux/help/> <https://unix.stackexchange.com/questions/106847/what-does-aux-mean-in-ps-aux>