

Project 1

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1 Lab 1: Question 1

Q: What are the advantages and disadvantages of using the same system call interface for manipulating both files and devices?

A: The advantages of using the same system call interface is devices can be accessed as tho they are files in the file system therefore they have similar properties when using the system call. This is done by the kernel which deals with devices through the file interface. The disadvantages of using the same system call interface is there is a loss of functionality due to lack of context in the file access API.

2 Lab 1: Question 2

Q: Would it be possible for the user to develop a new command interpreter using the system call interface provide by the operating system? How?

A: Yes, it should be possible for the user to develop a new command interpreter using the system call interface. This is done through the command interpreter being accessed the user level program through system calls and communication through files.

3 Lab 2: Question 1

Q: How is your console like the ancient TTY subsystem in Unix as described in <https://www.linusakesson.net/programming/tty/>

A: The two are similar in the way that they both use a line printer for output and a keyboard for input. The TTY was originally done on a type writer as the UI however, in theory, the two UIs are the same. The only difference being digital. There two are also similar in their command options. The user can read and modify the configuration of a device.