

Yi Lin

Professor Labouseur

CMPT 424N

August 31 2020

Lab 1 Question

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

Using the same system call interface for manipulating both files and devices allows the programmers to understand devices as files. Treating devices as file allow the programmer to code and access devices functionality just as writing and access a file.

However, this form of file access API to access devices does not work for most devices. For some devices, the functionality and performance might be unavailable as a result of using the API to access the file.

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

It would be possible for the user to develop a new command interpreter using the system call interface provided by the operating system. For a user to develop a new command interpreter, the user needs to run user-level programs that use the system call that relates to creating and managing processes and communication between processes.