

Operating Systems - Lab 1

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

- The advantage of using the same system call interface for both file manipulation and device manipulation is that devices can be accessed and manipulated in a similar (if not identical) manner to files within the system. This makes it easier on the user for writing programs for accessing files and devices because the programs are written in similar syntax, rather than needing two different methods. The disadvantage of using the same system call interface is that since device manipulation is slightly more complex than file manipulation, it may be difficult to access full functionality of the device by just using the file access API, which then results in loss of performance and possible functionality.

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

- Yes, it would be possible for a user to develop a new command interpreter using the system call interface provided by the operating system. The system call interface allows users to create and manipulate processes in the operating system, like creating and modifying files. Given this functionality, the user should have the necessary resources to create a new command interpreter.