

# Lab 1

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## 1 QUESTIONS

### 1.1 WHAT ARE THE ADVANTAGES AND DISADVANTAGES OF USING THE SAME SYSTEM CALL INTERFACE FOR MANIPULATING BOTH FILES AND DEVICES?

The advantages are that using the same system calls for both file and device manipulation, then the OS could access files the same way it would access connected devices. This means that the same code could be used for multiple functions with only slight changes to some parameters, such as specifying whether a file or a device is being accessed.

The disadvantages are that some devices might have limited functionality due to the same interface not being able to fully capture the full functionality of a device. This can result in reduced performance and functionality.

### 1.2 WOULD IT BE POSSIBLE FOR THE USER TO DEVELOP A NEW COMMAND INTERPRETER USING THE SYSTEM CALL INTERFACE PROVIDED BY THE OPERATING SYSTEM? HOW?

It is possible to develop a command interpreter using system call interfaces. A command line interpreter understands and interprets commands entered by either a person or a program and executes them, whereas system calls are how programs interact with the operating system.

We can argue that a CLI is reliant on system calls, so if a user can use system calls then they could create a new command interpreter using just system call interfaces.