

1. Suppose you are hired by a start-up company and are asked to design a new operating system from scratch. To sell as many copies of the operating system as possible, your operating system must run on as many devices as possible and used by as many people as possible.

List down possible design goals of such operating systems (e.g., easy to use).

2. Consider an operating system that runs only one process at a time, always completing the process before running the next one. Is it still necessary to differentiate between user mode and kernel mode? Is it still useful to have the notion of address space and logical memory address?
3. **Based on Problem 1.24.** To a programmer, a library wrapper to a system call looks like any other call to a library procedure. Is it important to know whether a library procedure results in a system call? Why?