Chapter 1: Operating System interfaces

* The job of an OS is to share a computer among multiple programs and to provide a more useful set of services than the hardware alone supports.
* OS shares the hardware among multiple programs so that they run (or appear to run) at the same time.
* OS provide controlled ways for programs to interact, so that they can share data or work together.
* OS provides services to user programs through an interface.

Kernel

* A kernel is the one and the only special program that provides services to the running programs.
* Each running program, called a process (instance of a program sometimes), has memory containing instructions, data, and a stack.
* The instructions implement the program’s computation. The data are the variables on which the computation acts.
* The stack organizes the program’s procedure calls.