

CHAPTER 6

- **Assembler:** A program that translates a program written in assembly language into an equivalent program in machine code.
- **Assembly language:** A user-oriented programming language that is close to machine code in form, but that uses English operation codes and symbolic labels to refer to memory addresses.
- **Authorization list:** A list of the folders, files, programs, and data that a particular user is permitted to access.
- **Batch operating system:** An early second-generation operating system in which user requests were recorded in groups and run through the computer in one batch. Each user request included simple commands to the operating system (load, compile, and so on) as well as the user's program and data.
- **Command language:** A simple set of commands to an operating system, usually batch or with a text-based interface, with which a user can access the system software.
- **Compiler:** A program that translates a high-level programming language (for example, Java or C++) into a low-level one (for example, assembly language).
- **Computer virus or worm:** A program designed to infiltrate a computer without proper authorization either for mischievous or malicious purposes.
- **Encryption:** The process of storing important information in a form that cannot be read without access to the proper encryption/decryption algorithm and keys.
- **File system:** A part of the system software that manages the files stored on the long-term memory like a hard drive.
- **Graphical user interface:** A user interface that gives an intuitive visual view of the computer (or if it is an application program, of the program itself and its data).
- **High-level programming language:** A programming language whose structure is very abstract and distinct from the computer architecture.
- **I/O System:** A part of the system software that manages the various input and output devices.
- **Interpreter:** A program that run a program in a high-level programming language without first creating a low-level version.
- **Job control language:** See "command language."
- **Label:** A symbolic name attached to an instruction or data in an assembly language program.
- **Language services:** The parts of the system software that translate or interpret high-level descriptions of algorithms into forms the computer can run on its hardware.
- **Low-level programming language:** A programming language whose structure closely resembles that of the underlying computer architecture and its machine code.
- **Memory manager:** A part of the system software that manages the loading of programs and data into the computer's memory.
- **Multiprogramming operating system:** An operating system in which many programs can be loaded at one time by different users and run either sequentially or in a time-sharing manner.
- **Network operating system:** An operating system that exists on a computer network and manages the resources of a single computer and the capabilities of a local area network (LAN).

- **Operating system:** The program that controls the overall operation of the computer and manages the different programs that provide services to the user.
- **Password:** A secret code string used to verify that the person requesting access to a computer is the person he or she is claiming to be.
- **Scheduler:** A part of the system software that manages which other programs get access to the CPU.
- **Super user:** A system administrator or other user who is authorized to perform all tasks and access all files on a computer system.
- **Time-sharing operating system:** A multiprogramming operating system in which many users and programs appear to run at one time; access to the CPU is measured out in “time slices” and shared among all processes.
- **User interface:** The way in which the end user communicates with the computer.
- **User name:** A special name used to identify a particular user of a computer system; required to be unique.
- **Utility:** A basic tool provided to the user by the system software, either as a program or as a set of libraries. Basic text editors and graphics libraries are two common examples.
- **Virtual machine:** The set of services and resources created by the system software that hides the details of the underlying machine.