Chapter 1 Key Terms

American Standard Code for Information Interchange (ASCII) - a standardized set of numeric values used to represent letters, symbols, and numeric values in a computer.

analog - a device that uses quantities that are variable or exist in a range

applet - a small Java program that can be included in Web pages to enhance the appearance of functionality of a Web page.

assembler - a program that converts a programmer’s statements into machine language code.

assembly language - a programming language that is very close to machine language.

binary number system - a number system that uses the digits 0 and 1 to represent data values.

bit - a binary digit that contain either a 0 or a 1.

bus - electronic circuits used to move data and instruction between the microprocessor chip and RAM, ROM, and peripheral devices.

byte - a combination of 8 bits used to represent a single character.

byte codes - Java instructions that have been partially compiled and can then be interpreted by a Java virtual machine.

character - an alphabetic letter, symbol, or numeral that can be processed by a computer.

compiler - a program that translates a high-level language into machine language code.

data - a computer’s representation of something that exists in the real world, such as names and addresses, dollar amounts, letters, spreadsheets, etc.

decimal number system - a number system that uses the digits 0 through 9 to represent data values.

digital - a device that uses switches (or digits) in combination to represent something in the real world.

executable file - a program file that can be run repeatedly without having to translate the program each time.

floppy disk - a storage device containing a magnetic disk used to hold small quantities of data and/or programs.

hard disk - a storage device consisting of one or more magnetic platters used to permanently store programs and data files.

hardware - the physical devices and components that make up a computer.

high-level language - an English-like or easy-to-write language that uses instructions that do not necessarily correspond one-to-one with a computer’s instruction set.

input - data that is to be processed by a computer.

interact - the process of getting

interpreter - a program that translates a program’s source code or byte codes into machine language while the program is being executed.

Java - a programming language originally created for specific-purpose computers htat has now found widespread acceptance in general-purpose computers.

Java virtual machine - interprets Java byte codes into a machine language instruction that can be executed on the platform running the Java program.

linker - a program that links multiple software object files into a single executable module.

low-level language - a programming language that is very precise and non-English like, such as machine language or assembly language.

machine language - a series of numeric values that a computer interprets as program instructions and addresses.

object code - machine language code that results from assembling or compiling a source code program file.

object file - the result of processing a program source file through a compiler.

operating system - computer software that controls the operation of a computer.

output - the data resulting from the processing of input.

primary storage - internal memory called RAM that is the place where the computer stores active programs and data being processed.

programming language - a means of providing processing instructions to a computer without having to learn machine language.

RAM - the primary storage area in a computer used to hold programs and data being processed.

ROM - memory circuits that have data and programs permanently stored on them, normally used to start up the computer.

secondary storage - storage devices that retain data even when power is turned off, such as hard disks, floppy disks, or CD-ROMS.

source code - a program in its native form, before being assembled or compiled.

states - the substance that an object can exist in, such as on or off.

text editor - a program that can be used to create a program by entering text strings and values.

text file - a file saved by a text editor.

Unicode - a standard that defines how characters and symbols are represented in a computer.

volatile storage - a term to describe a computer component, such as RAM, that cannot retain its contents when power is shut off.