Chapter 4:

Software Basics: The Ghost in the Machine

## Multiple Choice:

1. A computer system only recognizes:
   1. 0s and 1s.
   2. modem and coaxial cable signals.
   3. ASCII code.
   4. EDCDIC code.

**Answer:** A **Reference:** Software Basics Introduction **Difficulty:** Easy

1. A set of computer instructions designed to solve a specific problem is referred to as:
   1. hardware.
   2. a device.
   3. a program.
   4. a hardware concept.

**Answer:** C **Reference:** Software Basics Introduction **Difficulty:** Easy

1. When in use, software is temporarily stored in:
   1. memory or RAM.
   2. ROM.
   3. the BIOS.
   4. the hard disk.

**Answer:** A **Reference:** Software Basics Introduction **Difficulty:** Easy

1. \_\_\_\_\_\_\_\_\_\_\_\_ is what allows a computer to function as a word processor, then a browser, then a calculator.
   1. Hardware
   2. Firmware
   3. Software
   4. Drivers

**Answer:** C **Reference:** Software Basics Introduction **Difficulty:** Easy

1. Errors in a software program are referred to as:
   1. software omissions.
   2. bugs.
   3. viruses.
   4. computer faults.

**Answer:** B **Reference:** Food for Thought **Difficulty:** Easy

1. A set of step-by-step procedures for accomplishing a task is known as a(n):
   1. hardware program.
   2. algorithm.
   3. software bug.
   4. firmware program.

**Answer:** B **Reference:** A Fast, Stupid Machine **Difficulty:** Moderate

1. When a programmer checks to see if a program functions correctly and then corrects errors, it is known as:
   1. debugging.
   2. de-erroring.
   3. default error-checking.
   4. error-proofing a program.

**Answer:** A **Reference:** A Fast, Stupid Machine **Difficulty:** Easy

1. For a program to be read by the CPU, it must be loaded into:
   1. memory or RAM.
   2. the hard disk.
   3. the CD drive.
   4. the BIOS.

**Answer:** A **Reference:** How It Works 4.1: Executing a Program **Difficulty:** Moderate

1. When reading a program, the CPU \_\_\_\_\_\_\_\_\_\_\_\_ instructions from the program.
   1. runs and operates
   2. opens and reads
   3. fetches and executes
   4. executes and stores

**Answer:** C **Reference:** How It Works 4.1: Executing a Program **Difficulty:** Challenging

1. Machine language uses:
   1. numeric code.
   2. English language code.
   3. Java language.
   4. CPU processing code.

**Answer:** A **Reference:** The Language of Computers **Difficulty:** Challenging

1. Typical computer programming languages used today include all of the following EXCEPT:
   1. Visual Basic.NET.
   2. C++.
   3. Java.
   4. machine language.

**Answer:** D **Reference:** The Language of Computers **Difficulty:** Challenging

1. Java is referred to as:
   1. high-level language.
   2. low-level language.
   3. programming mid-level language.
   4. a hardware device driver.

**Answer:** A **Reference:** The Language of Computers **Difficulty:** Moderate

1. A compiler is:
   1. the same thing as a device driver.
   2. physically located in the CPU.
   3. hardware.
   4. the most common type of translator program.

**Answer:** D **Reference:** The Language of Computers **Difficulty:** Challenging

1. Programs now resemble \_\_\_\_\_\_\_\_\_\_\_\_ much more than in the past.
   1. natural language
   2. machine language
   3. low-level language
   4. compiler and translation software

**Answer:** A **Reference:** The Language of Computers **Difficulty:** Moderate

1. \_\_\_\_\_\_\_\_\_\_\_, common in today’s software, supplement(s) the help files that are available at the user’s request.
   1. Printed manuals
   2. CDs
   3. Help DVDs
   4. Online help

**Answer:** D **Reference:** Documentation **Difficulty:** Moderate

1. The process of eliminating problems and errors and improving the software is known as:
   1. software enhancement.
   2. software advancement.
   3. upgrading.
   4. downgrading.

**Answer:** C **Reference:** Upgrading **Difficulty:** Easy

1. Minor revisions in software are reflected in the use of:
   1. whole numbers.
   2. decimal numbers.
   3. version letters.
   4. upgrade code letters.

**Answer:** B **Reference:** Upgrading **Difficulty:** Moderate

1. A major upgrade or revision of software is reflected in the use of:
   1. whole numbers.
   2. decimal numbers.
   3. version letters.
   4. upgrade code letters.

**Answer:** A **Reference:** Upgrading **Difficulty:** Moderate

1. An EULA stands for:
   1. end-use license arrangement.
   2. environmental use licensing agreement.
   3. employee-use legal arrangement.
   4. end-user license agreement.

**Answer:** D **Reference:** Disclaimers **Difficulty:** Moderate

1. When a user purchases software, \_\_\_\_\_\_\_\_\_\_\_\_ is actually purchased.
   1. a license to use the software
   2. a set-up of CDs, therefore, the software itself,
   3. a software permit
   4. an open agreement allowing the user to copy the software

**Answer:** A **Reference:** Licensing **Difficulty:** Moderate

1. A campus or a mid-size company may purchase \_\_\_\_\_\_\_\_\_\_\_\_ so all users have legal access to the software.
   1. a standard software license
   2. just one license and copy it to all machines
   3. simultaneous-user licenses
   4. volume licenses

**Answer:** D **Reference:** Licensing **Difficulty:** Moderate

1. Nearly all commercial software is:
   1. trademarked.
   2. copyrighted.
   3. free for copying.
   4. shareware.

**Answer:** B **Reference:** Licensing **Difficulty:** Easy

1. Software that is free to everyone is known as:
   1. freeware.
   2. public domain software.
   3. public-access software.
   4. shareware.

**Answer:** B **Reference:** Distribution **Difficulty:** Moderate

1. Integrated software packages generally include all EXCEPT a:
   1. word processor.
   2. database.
   3. graphics program.
   4. Web browser.

**Answer:** D **Reference:** Integrated Applications and Suites: Software Bundles **Difficulty:** Moderate

1. The primary application suite on the market is:
   1. Microsoft Office.
   2. WordPerfect Suite.
   3. Adobe Creative Suite.
   4. Microsoft Works.

**Answer:** A **Reference:** Integrated Applications and Suites: Software Bundles **Difficulty:** Easy

1. Operating systems and utility programs are in a class of software known as:
   1. application software.
   2. system software.
   3. software suites.
   4. BIOS software.

**Answer:** B **Reference:** System Software: The Hardware-Software Connection **Difficulty:** Moderate

1. Every general-purpose computer must have a(n):
   1. word processor program.
   2. software license agreement.
   3. software suite.
   4. operating system.

**Answer:** D **Reference:** What the Operating System Does **Difficulty:** Moderate

1. If the computer is on and the computer is running properly, the \_\_\_\_\_\_\_\_\_\_\_\_ must be active and running.
   1. BIOS instructions
   2. operating system
   3. large array of utility programs
   4. system software

**Answer:** B **Reference:** What the Operating System Does **Difficulty:** Easy

1. When a computer is off, what is in RAM?
   1. The operating system
   2. The BIOS
   3. The software applications
   4. Nothing

**Answer:** D **Reference:** How It Works 4.2: The Operating System **Difficulty:** Moderate

1. When a computer is turned on, where does it get the first instructions that it loads into RAM?
   1. From RAM
   2. From ROM
   3. From the hard disk
   4. From a CD

**Answer:** B **Reference:** How It Works 4.2: The Operating System **Difficulty:** Challenging

1. What handles communication between the CPU and the disk drive(s)?
   1. RAM
   2. The CPU
   3. The operating system
   4. ROM

**Answer:** C **Reference:** How It Works 4.2: The Operating System **Difficulty:** Challenging

1. What handles memory when several jobs are being processed at the same time?
   1. The BIOS instructions
   2. The operating system
   3. The data management program
   4. The device drivers

**Answer:** B **Reference:** Memory Management **Difficulty:** Moderate

1. Utility programs make it easier to complete all of the following EXCEPT:
   1. writing a letter.
   2. copying files between storage devices.
   3. repairing a damaged disk.
   4. virus protection.

**Answer:** A **Reference:** Utility Programs and Device Drivers **Difficulty:** Easy

1. The program that allows I/O devices to communicate with the computer is known as a(n):
   1. device driver.
   2. utility program.
   3. operating device file.
   4. software device file.

**Answer:** A **Reference:** Utility Programs and Device Drivers **Difficulty:** Moderate

1. \_\_\_\_\_\_\_\_\_\_\_\_ is when the operating system is loaded into RAM.
   1. Copying
   2. Device driving
   3. Booting
   4. Multitasking

**Answer:** C **Reference:** Where the Operating System Lives **Difficulty:** Easy

1. The \_\_\_\_\_\_\_\_\_\_\_is the front-end of a program and how a user works with the software.
   1. RAM resident portion
   2. device driver
   3. application
   4. user interface

**Answer:** D **Reference:** Where the Operating System Lives **Difficulty:** Easy

1. GUI refers to:
   1. graphical use interaction.
   2. guaranteed user interface.
   3. graphical user interface.
   4. graphics utilized internally.

**Answer:** C **Reference:** Desktop Operating Systems **Difficulty:** Moderate

1. A \_\_\_\_\_\_\_\_\_\_\_\_ is a collection of files.
   1. document
   2. folder
   3. partition
   4. database

**Answer:** B **Reference:** Desktop Operating Systems **Difficulty:** Easy

1. Who owns the Windows operating system?
   1. Intel
   2. IBM
   3. Apple
   4. Microsoft

**Answer:** D **Reference:** Desktop Operating Systems **Difficulty:** Easy

1. What is the name of the operating system rarely found on desktop PCs but used in servers and high-end workstations?
   1. UNIX
   2. Windows
   3. MS-DOS
   4. Mac OS

**Answer:** A **Reference:** Multiple User Operating Systems: UNIX and Linux **Difficulty:** Easy

1. What is the most recent version of Windows?
   1. Windows NT
   2. Windows XP
   3. Windows 2000
   4. Windows 2004

**Answer:** B **Reference:** Hardware and Software Platforms **Difficulty:** Easy

1. What is the platform-neutral programming language that can run on Windows, Macintosh, or UNIX?
   1. Machine language
   2. Java
   3. Microsoft Office language
   4. Software.NET

**Answer:** B **Reference:** Hardware and Software Platforms **Difficulty:** Moderate

1. Electronic marks put on a disk as tracks and sectors are known as:
   1. clustering.
   2. defragmenting.
   3. copying.
   4. formatting.

**Answer:** D **Reference:** Defragmentation: The Cure for Fragmented Files **Difficulty:** Easy

1. A group of sectors is known as a:
   1. block.
   2. track.
   3. system space.
   4. hard disk space.

**Answer:** A **Reference:** Defragmentation: The Cure for Fragmented Files **Difficulty:** Challenging

1. What is the name of the music-sharing service that was shut down in 2001?
   1. Napster
   2. KaZaA
   3. Netscape
   4. Windows Media Player

**Answer:** A **Reference:** Intellectual Property and the Law **Difficulty:** Moderate

## Fill in the Blank:

1. When you discover a problem or mistake within a software program, you have found a(n) \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** bug **Reference:** Food for Thought **Difficulty:** Easy

1. The process of the CPU accessing an instruction of a program is known as \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** fetch **Reference:** How It Works 4.1: Executing a Program **Difficulty:** Challenging

1. At the most basic level, a computer processes software instructions in a native \_\_\_\_\_\_\_\_\_\_\_\_ language.

**Answer:** machine **Reference:** The Language of Computers **Difficulty:** Challenging

1. Languages such as C# and C++ are known as \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** high-level languages **Reference:** The Language of Computers **Difficulty:** Challenging

1. \_\_\_\_\_\_\_\_\_\_\_\_ refers to the usability of software based on the operating system and the computer resources.

**Answer:** Compatibility **Reference:** Compatibility **Difficulty:** Challenging

1. \_\_\_\_\_\_\_\_\_\_\_\_ is software that is initially free with eventual payment of a fee at a later date if the user chooses.

**Answer:** Shareware **Reference:** Distribution **Difficulty:** Moderate

1. Microsoft Works and AppleWorks are examples of \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** integrated software **Reference:** Integrated Applications and Suites: Software Bundles  
**Difficulty:** Moderate

1. A program that lets a user copy, move, and rename files is called a(n) \_\_\_\_\_\_\_\_\_\_\_\_ utility.

**Answer:** file-management **Reference:** File-Management Utilities **Difficulty:** Easy

1. In order to save a previously saved file to a different location or with a different name, use the \_\_\_\_\_\_\_\_\_\_\_menu option.

**Answer:** Save As **Reference:** Managing Files from Applications **Difficulty:** Easy

1. Specialized software such as medical billing, library cataloging, or auto parts purchasing are applications known as \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** vertical-market or custom applications   
**Reference:** Vertical-Market and Custom Software **Difficulty:** Moderate

1. System software is a type of software that includes the operating system and \_\_\_\_\_\_\_\_\_\_\_\_ programs.

**Answer:** utility **Reference:** System Software: the Hardware-Software Connection  
**Difficulty:** Challenging

1. Interaction between the software and the hardware of a computer is handled by the \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** operating system **Reference:** What the Operating System Does **Difficulty:** Challenging

1. \_\_\_\_\_\_\_\_\_\_\_\_ processing is the technique of large, multiuser computers handling several jobs simultaneously.

**Answer:** Concurrent **Reference:** Coordinating the Concurrent Processing of Jobs   
**Difficulty:** Challenging

1. The process of printing a term paper while entering data into a spreadsheet while downloading clipart from the Internet is known as \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** multitasking **Reference:** Coordinating the Concurrent Processing of Jobs   
**Difficulty:** Easy

1. The \_\_\_\_\_\_\_\_\_\_\_\_ keeps track of the computer’s memory, seeing that jobs are handled appropriately and timely.

**Answer:** operating system **Reference:** Memory Management **Difficulty:** Challenging

1. In a multiuser computer system, each user generally has a unique identification as their login and a \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** password **Reference:** Resource Monitoring, Accounting, and Security  
**Difficulty:** Easy

1. When the operating system requests an application program to be executed, it is temporarily stored in \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** RAM or memory **Reference:** How It Works 4.2: The Operating System **Difficulty:** Moderate

1. Special-purpose computers, games, and handheld computers usually have the operating system stored in \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** ROM **Reference:** Where the Operating System Lives **Difficulty:** Challenging

1. MS-DOS stands for \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** Microsoft Disk Operating System **Reference:** Desktop Operating Systems **Difficulty:** Easy

1. The multiuser operating system historically used by academic and government institutions is \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** UNIX **Reference:** Multiple User Operating Systems: UNIX and Linux **Difficulty:** Moderate

## Matching:

1. Match the following terms to their meanings:

I. Windows task bar A. holds a collection of files

II. folder B. representative picture on the desktop

III. document C. provides one-click access to open applications

IV. icon D. virtual workspace on the monitor

V. window E. file

VI. desktop F. Mac OS

VII. directory G. choices depend on the onscreen object currently selected

VIII. context-sensitive menus H. also referred to as a folder

IX. dialog box I. framed rectangle that can be opened, closed, or resized

X. GUI J. a box to specify a choice by filling in blanks and clicking check boxes

**Answers:** C, A, E, B, I, D, H, G, J, F **Reference:** The User Interface: The Human-Machine Connection  
**Difficulty:** Challenging

1. Match the following terms to their meanings:

I. Microsoft Windows XP A. Windows Me

II. Windows Server 2003 B. runs only on a Mac

III. Microsoft Windows C. server-based Windows version  
 Millennium Edition

IV. Windows CE .NET D. free operating system

V. Dual-boot PCs E. multiuser operating system popular in academic institutions

VI. Platform F. the hardware and the operating system

VII. Palm OS G. most recent version of Windows

VIII. UNIX H. Windows to Linux and vice versa

IX. Mac OS X I. used for handhelds

X. Linux J. stripped-down Windows version

**Answers:** G, C, A, J, H, F, I, E, B, D **Reference:** The User Interface: The Human-Machine Connection  
**Difficulty:** Moderate