# Computers: Tools for an Information Age

Chapter 5
Input and Output: The User Connection

### Objectives

- Describe the user relationship with computer input and output
- Explain how data is input into a computer system and differentiate among various input equipment
- Describe how a monitor works and the characteristics that determine quality
- List and describe the different methods of computer output

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- Differentiate among different kinds of printers
- Explain the function of a computer terminal and describe the types of terminals
- Describe the ethical considerations involved in handling computer data

### How Users See Input and Output

- Users submit data (input) to the computer to get processed information (output)
  - Output can be <u>instant reaction</u> to input
  - Also can be <u>separated by time</u>, distance, or both

# Input: Getting Data from the User to the Computer

- Keyboard
- Pointing devices
- Source data automation

## Output: Information for the User

- Computer screens
- Printers
- Voice output
- Music output
- Microform

#### Terminals

- Combine input and output capabilities
- Dumb terminal
  - Keyboard for input and monitor for output
  - No processing capability
- Intelligent terminal
  - Has limited memory and a processor
- Point-of-sale (POS) terminal
  - Captures retail sales data when transaction takes place

### Computer Graphics

- Business graphics
- Video graphics
- Computer-aided design/computer-aided manufacturing (CAD/CAM)

### **Ethics and Data**

- Once data is in computer, there are many ways it can be used
- Ethical issues to ponder
  - Is it ethical to use a computer to alter photographs?
  - Is it ethical to erase e-mail messages that may be of interest to a party in a lawsuit?
  - Is it ethical to use someone else's data for your purposes?