

COMPUTER FUNDAMENTALS

TRAINING MANUAL

A Beginner's Guide to Understanding
Computers and Digital Skills



Computer Basics



Hardware & Software



Input & Output Devices



Operating System Basics



Essential Digital Skills



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Chapter 1: Introduction to Computer Hardware and Software

Learning Objectives

After completing this chapter, you will be able to:

- Understand what a computer is.
- Identify the main hardware components of a computer.
- Understand the meaning of software.
- Differentiate between hardware and software.
- Identify common types of software used in daily work.

What is a Computer?

A computer is an electronic machine that helps us perform different types of work quickly and accurately.

A computer can:

- Accept data (Input)
- Process the data
- Store the data
- Display the result (Output)

Today, computers are used in offices, schools, hospitals, banks, factories, airports, and homes.

Basic Parts of a Computer

A computer system is made up of two main parts:

1. Hardware
2. Software

Both are equally important. A computer cannot work without either one.



What is Hardware?

Hardware means the physical parts of a computer that you can see and touch.

Examples of Hardware

- Monitor
- CPU (System Unit)
- Keyboard
- Mouse
- Printer
- Scanner
- Speakers
- Webcam
- Microphone
- Hard Disk (HDD)
- Solid State Drive (SSD)
- RAM (Memory)
- USB Flash Drive



Common Hardware Components

1. Monitor

A monitor displays information, pictures, videos, and applications on the screen.

Example: It works like a television screen but is used with a computer.

2. CPU (Central Processing Unit)

The CPU is called the **Brain of the Computer**.

It performs calculations, processes instructions, and controls all computer operations.

3. Keyboard

A keyboard is an input device used to type letters, numbers, and symbols.

It is also used to enter commands using shortcut keys.

4. Mouse

A mouse helps you control the pointer on the screen.

You can:

- Click
- Double-click
- Right-click
- Drag and Drop
- Scroll

5. Printer

A printer converts digital documents into paper copies.

This is called a **Hard Copy**.

6. Scanner

A scanner converts paper documents or photographs into digital files.

7. Speakers

Speakers produce sound from the computer.

Examples include music, videos, and online meetings.

8. Webcam

A webcam is used for video calls and online meetings.

9. Microphone

A microphone records your voice or allows you to speak during online meetings.

10. Storage Devices

Storage devices save your files permanently.

Examples:

- Hard Disk Drive (HDD)
- Solid State Drive (SSD)
- Pen Drive (USB Drive)
- Memory Card

11. RAM (Random Access Memory)

RAM stores data temporarily while the computer is running.

More RAM generally helps a computer run multiple programs more smoothly.

What is Software?

Software is a collection of programs and instructions that tells the computer what to do.

Unlike hardware, software **cannot be touched**.

Types of Software

Software is mainly divided into two categories.

1. System Software

System software controls the computer and allows other programs to run.

Examples

- Microsoft Windows
- Linux
- macOS

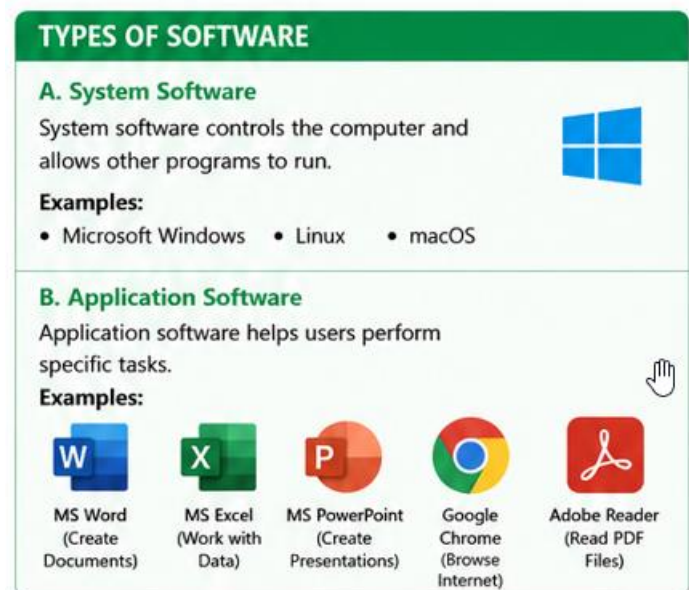
Without an operating system, a computer cannot function properly.

2. Application Software

Application software helps users perform specific tasks.

Examples

- Microsoft Word – Create documents
- Microsoft Excel – Perform calculations and analyze data
- Microsoft PowerPoint – Create presentations
- Google Chrome – Browse the Internet
- Adobe Acrobat Reader – Read PDF files
- VLC Media Player – Play videos and music



Difference Between Hardware and Software

Hardware	Software
Physical parts of a computer	Programs and applications
Can be seen and touched	Cannot be seen or touched physically
Manufactured	Developed by programmers
Can wear out over time	Can be updated or reinstalled
Example: Keyboard	Example: Microsoft Word

How Hardware and Software Work Together

A computer works only when hardware and software work together.

Example

When you type a letter in Microsoft Word:

- The keyboard sends your input.
- Windows receives the input.
- Microsoft Word displays the text.
- The monitor shows the result.
- The SSD or HDD saves the document.

Real-Life Example

Think of a computer like a human body.

- Brain = CPU
- Eyes = Monitor
- Hands = Keyboard and Mouse
- Memory = RAM
- Storage = Hard Disk or SSD

The software is like the instructions that tell the body what to do.

Quick Review

Answer these questions.

1. What is a computer?
 2. What is hardware?
 3. What is software?
 4. Name any five hardware devices.
 5. Name three application software programs.
 6. What is the function of RAM?
 7. Which part is called the brain of the computer?
 8. Which software is used to create documents?
 9. What is the difference between hardware and software?
 10. Why do we need both hardware and software?
-

Practical Activity

Activity 1

Look at a desktop computer and identify:

- Monitor
- CPU
- Keyboard
- Mouse
- Printer

Activity 2

Open your computer and identify three software applications installed on it.

Activity 3

Discuss with your partner:

- Which hardware device do you use the most?
- Which software do you use every day?

Chapter Summary

In this chapter, you learned:

- What a computer is
- The meaning of hardware
- The meaning of software
- Common computer hardware devices
- Types of software
- The difference between hardware and software
- How hardware and software work together

These concepts form the foundation of computer knowledge and will help you learn Microsoft Office and other computer applications more effectively.

Chapter 2: Windows Productivity

Learning Objectives

After completing this chapter, you will be able to:

- Manage files and folders efficiently.
- Organize your documents properly.
- Search files quickly in Windows.
- Recover deleted files from the Recycle Bin.
- Follow best practices for file management.

What is File Management?

File management means **creating, organizing, storing, searching, and protecting files and folders** on your computer.

Good file management helps you:

- Find files quickly.
- Save time.
- Reduce duplicate files.
- Keep your computer organized.

- Protect important documents.

What is a File?

A **file** is a collection of information stored on a computer.

Examples:

- MS Word Document (.docx)
- Excel Workbook (.xlsx)
- PowerPoint Presentation (.pptx)
- PDF File (.pdf)
- Image (.jpg, .png)
- Video (.mp4)

What is a Folder?

A **folder** is used to store and organize files.

A folder can also contain other folders called **Subfolders**.

File Management Best Practices

1. Create Meaningful Folder Names

Instead of

Folder1

Folder2

New Folder

Use

HR Documents

Sales Reports

Training Materials

Invoices 2026



2. Organize Files by Category

Keep similar files together.

Example

Office Documents

|— HR

|— Finance

|— Marketing

|— Sales

3. Use Date in File Names

Good Example

Sales_Report_2026_July.xlsx

Invoice_2026_07_15.pdf

This makes files easier to sort.

4. Avoid Duplicate Files

Instead of

Report Final

Report Final New

Report Latest

Report Final Final

Use version numbers.

Report_v1

Report_v2

Report_v3

5. Backup Important Files

Save important files in more than one location.

Examples

- OneDrive

- External Hard Disk
- USB Drive
- Company Network Drive

6. Delete Unnecessary Files

Remove files that are no longer required.

This saves storage space.

Creating a New Folder

Method 1

1. Open File Explorer.
2. Go to the required location.
3. Right-click.
4. Select **New**.
5. Click **Folder**.
6. Type the folder name.
7. Press **Enter**.

Shortcut Key

Ctrl + Shift + N

creates a new folder instantly.

Image Suggestion: Step-by-step screenshot showing folder creation.

Rename a File or Folder

Method

1. Select the file.
2. Press **F2**.
3. Type the new name.
4. Press **Enter**.

Copy, Cut and Paste Files

Copy

Shortcut

Ctrl + C

Creates another copy.

Cut

Shortcut

Ctrl + X

Moves the file.

Paste

Shortcut

Ctrl + V

Places the copied or moved file.

Image Suggestion: Diagram showing a file being copied from one folder to another.

Search Files and Folders

Windows allows you to search files quickly.

Search by File Name

Example

Budget

Invoice

Training

Search by File Type

Examples

*.docx

*.xlsx

*.pptx

*.pdf

Search by Date

Examples

Today

Yesterday

Last Week

Last Month

Search by Size

Examples

Large Files

Medium Files

Small Files

Image Suggestion: Windows File Explorer search box with search results.

Organize Documents

Windows provides different ways to organize files.

Sort By

- Name
- Date Modified
- Size
- Type

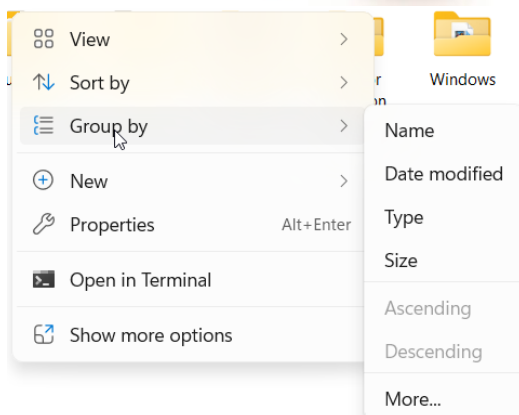
Group By

Group files by

- Type
- Date
- Size

Change View

Different viewing options



- Extra Large Icons
- Large Icons
- Medium Icons
- Small Icons
- List
- Details
- Tiles
- Content

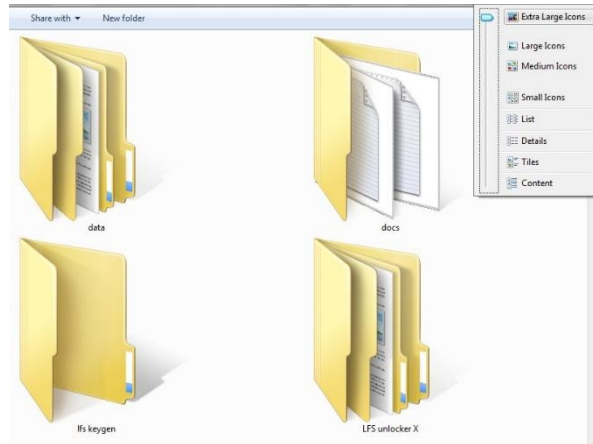


Image Suggestion: Comparison of different File Explorer view modes.

Recycle Bin

When you delete a file, it usually goes to the **Recycle Bin** instead of being permanently removed.

This gives you a chance to recover it.

Restore Deleted Files

Steps

1. Open Recycle Bin.
2. Select the file.
3. Right-click.
4. Click **Restore**.

The file returns to its original location.

Image Suggestion: Recycle Bin window showing the **Restore** option.

Permanently Delete Files

To delete a file permanently without sending it to the Recycle Bin:

Press

Shift + Delete

Windows will ask for confirmation.

Be careful because permanently deleted files are more difficult to recover.

Empty Recycle Bin

Steps

1. Right-click Recycle Bin.
2. Click **Empty Recycle Bin**.
3. Confirm the action.

Keyboard Shortcuts

Shortcut	Function
Windows + E	Open File Explorer
Ctrl + N	New Window
Ctrl + Shift + N	New Folder
Ctrl + C	Copy
Ctrl + X	Cut
Ctrl + V	Paste
Ctrl + Z	Undo
Ctrl + Y	Redo
Delete	Move to Recycle Bin
Shift + Delete	Permanent Delete
F2	Rename