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INFORMATION TECHNOLOGY STUDENT TEXTBOOK GRADE 7

Federal Democratic Republic of Ethiopia Ministry of Education

INFORMATION TECHNOLOGY

STUDENT TEXTBOOK

GRADE 7



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FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA
MINISTRY OF EDUCATION

INFORMATION TECHNOLOGY

STUDENT TEXTBOOK

GRADE 7

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Preface

The way humans communicate and work has evolved as a result of Information-Technology (IT). Information technology is defined as the use of systems, primarily computers and telecommunications, for the storage, retrieval, and transmission of data. We live in the information age, and IT is used in almost every industry. It is now part of our daily lives and has had a significant impact on society. We use information technology for education, communication, health, business, and so forth. Through online applications and smart gadgets, family and friends may stay in touch. Thus, IT is important for every one of us.

This textbook is for grade 7 students of the Federal Democratic Republic of Ethiopia (FDRE) to teach the basic knowledge and skills of IT since it is essential for their future education and lives.

The books covers selected fundamental knowledge and skills of IT. It is organized into six units as shown below:

- Unit One introduces the fundamental concepts of Introduction to Information and Communication Technology (ICT), Information Technology (IT) and Computer.
- Unit Two presents and describes the basic Computer Hardware and their functionalities.
- Unit Three discusses the basic concepts and skills of using computer software.
- Unit Four covers the basic terminology of internet, and knowledge and skills necessary to use the internet.
- Unit Five shows how to apply Security and Safety issues while using computers.
- Unit Six offers the students the basic programming concepts of LOGO programming.

This textbook is designed in a simple and student centered approach which invites students to use different learning methods. It also includes brainstorming activities to help students to link their previous knowledge with the topics. Activities which help students to develop their skills and knowledge are incorporated. In addition, the textbook contains the basic and current knowledge of IT.

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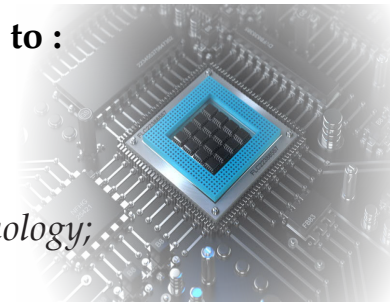
UNIT 1 Introduction to Information & Communication Technology

Unit Outcomes



At the end of this unit, students will be able to :

- *define ICT;*
- *define computer;*
- *differentiate between IT and ICT;*
- *explain the concepts of information technology;*
- *discuss the basic elements of ICT system.*

Overview

This unit draws students' attention to the important role that Information and Communication Technology (ICT) plays in our daily lives. Nowadays, ICT is used in communication, education, entertainment and e-commerce. The unit also describes the basic terminologies such as information communication technology, and information technology. The basic elements of ICT including data, information, user, communication and technology are described in detail in the unit. In addition, the unit gives background knowledge about computers and their basic characteristics.

1.1. Information and Communication Technology

Brainstorming activity



Have you ever thought what ICT is? How it works?

The term Information Communication Technology (ICT) refers to all communication technologies, including the internet, mobile phones, television, computers, tablets, and cameras. It also refers to integrating telephone and audio-visual networks with computer networks to enable the users to access, retrieve, store, transmit, and manipulate information in a digital or electronic form.

Information Technology (IT) refers to an entire industry that uses computers, networking, software and other equipment to manage information. It is the process of creating, maintaining, and using computer software, hardware, and networks.Although IT and ICT are related concepts, they are not the same. IT is a broader concept and a technology that is related to computing data whereas ICT is related technologies in communication.

Activity 1.1

- Discuss the term ICT in groups and share your experiences of using ICT with your friends.
- Write the difference between IT and ICT using your own words and present it to the class.

1.2. Basic Elements of ICT System

Brainstorming activity



Can anyone tell us the difference between data and information?

ICT system consists of five basic elements such as data, information, communication, user, and technology.

Data: It is one of the basic elements of ICT system. It can be defined as any type of representation of an object or an event. Numbers, text symbols, speech, image, and so on are all examples of representation. Data has to be processed, or provided with a context before it is given meaning for example Abebe, 15, Kebede, 17, Sara, 12, Mohammed, 16, Alemu, 20, Dawit, and 18. Figure 1.1 shows a list of raw and processed data.

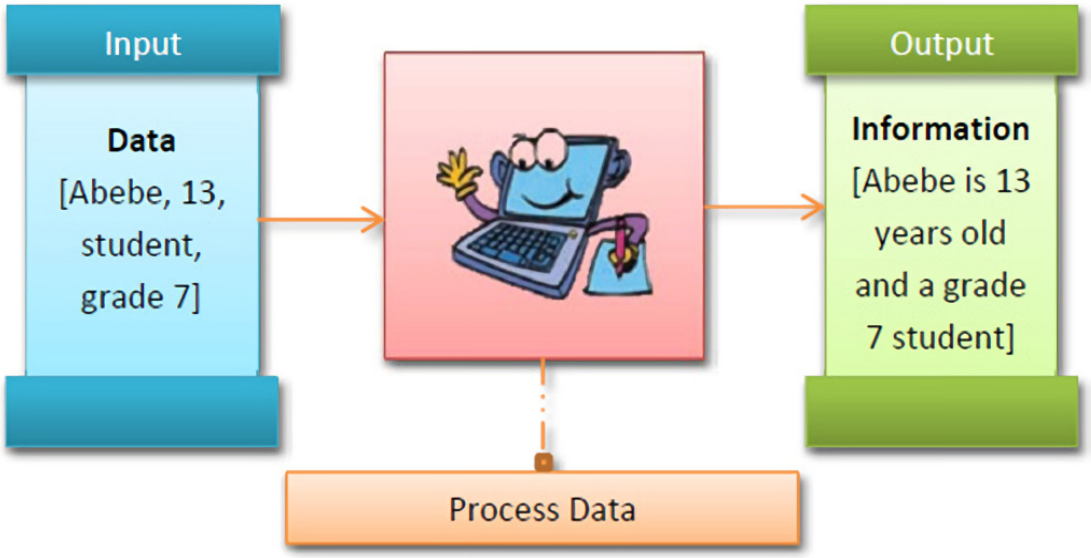


Figure 1.1: The differences between data and information

Information: is the result of processed data. Data processing occurs when data is collected and translated into usable information. This result allows the processed data to be put into context and give meaning.

Data only takes meaning and becomes information when it is interpreted. Data interpretation is the process of reviewing data through some predefined processes which will help assign some meaning to the data and arrive at a relevant conclusion. Figure 1.1 shows how to process data to create meaningful information. A list of data and meaningful information is provided below in Example 1.

Example 1

Look at the examples of data given below:

- **Abebe, Kebede, Sara, Melat, Alemu, Dawit**
- **15,17, 18, 15, 14,2, 0**

Only when we assign a context or meaning to it, the data becomes information.

- **Abebe, Kebede, Sara, Melat, Alemu, and Dawit are names of grade 7 students.**
- **15,17,18,15.14,20 are the ages of grade 7 students.**
- **The age of grade 7 students ranges from 14 to 20.**

User: is a person who has access to ICT and utilizes it. It is humans who develop and operate the software, feed data, create and maintain the hardware, define the procedures, and finally determine if an ICT succeeds or fails. Figure 1.2 shows a person using a computer to perform daily activity.



Figure 1.2: A person accessing a computer

Communication: is the process of passing information from one place to another. Providing information to computers, reading information from any system, or the transfer of message between two people are some of the examples of communication.

To have communication among computers and other ICT systems, communication devices are mandatory. Communication devices are basically devices that allow computers and other ICT systems to communicate with one another. Figure 1.3 shows an example of ICT communication service.



Figure 1.3: Example of communication service

Technology: refers to a set of tools and machines created by humans to solve problems. It allows humans to study and evolve the physical elements that are present in their lives. Technology can be found in our homes, in personal places, in industries, in business, and in the medical profession. For example, we can use mobile phones technology which enables us to communicate with other people who are far away from us. Television is also another example of technology we use to watch movies and news.



Figure 1.4. Cell Phone Technology

Activity 1.2

- Identify the basic elements of ICT system and discuss each of them in groups with examples
- Turn the given data below into information by giving any meaningful and appropriate title to them.

  - 0,2,4,6,8,10

  -Biology, Physics, Chemistry, Mathematics

1.3. ICT in our daily life

Brainstorming activity



Have you ever used IT before? For what purpose have you used it?

ICT is a broad subject and an evolving concept. It has a great impact on our daily lives. We encounter many new technologies in our everyday lives. We use ICT at home, at school, in the workplace, in the streets, in places we visit during holidays, on business, and in public spaces Figure 1.5 shows application of ICT in our daily lives.



Figure 1.5: ICT in daily life

1.3.1. ICT in communication

We all know that ICT plays an important role in our lives. In the past, our parents used to write letters. However, with the help of ICT, it is now easy to communicate with our loved ones.

For example, humble online communication for experience sharing and peacekeeping, short message service (SMS), email and social media are the most common services of ICT that we use in our daily life to communicate with our loved ones. Radio and television are also a kind of ICT for communication. Figure 1.6 is a typical example for the applications of ICT in communication.



Figure 1.6: ICT in communication

1.3.2. Information Communication Technology in Education

ICT contributes greatly to education because it improves the way of education and provides a better educational environment. For example, we can think of radio and television education programs prepared by the Ethiopian Ministry of Education for primary schools, and plasma educational channels for secondary schools. The use of computers, tablets, displays, interactive electronic boards, and ICT technologies help to expand access to education.

Through ICT, learning can occur anytime and anywhere. For example, students can access textbooks and other educational resources from the internet. These resources can be obtained through video clips, audio sounds, and visual presentations. ICT enables an inclusive right for information access. For example, if someone has a sight problem, he/she can access information by listening to audio sounds.

Figure 1.7 shows an interactive electronic board which widely used for educational purposes.



Figure 1.7: Application of ICT in education

1.3.3. Information Communication Technology in Entertainment

ICT provides a variety of entertainment and leisure activities that can be easily accessed from our home. Directly from television, we can watch movies and music. As illustrated in Figure 1.8, we can also play games on the internet in our free time.



Figure 1.8: ICT in entertainment

1.3.4. Information Communication Technology in Electronic commerce

Electronic commerce (E-commerce) is the buying and selling of goods and services, or the transfer of funds and data through the internet. A typical example of ICT in e-commerce is shown in Figure 1.9 below.



Figure 1.9: ICT in e-commerce

Generally, ICT is all around us. It is becoming increasingly important in people's lives, and its importance is predicted to continue in the future.

Activity 1.3

- Give some examples (examples that are not mentioned in this textbook) of the uses of ICT in daily lives.
- Please make a small group and discuss the role of ICT in the following cross-cutting issues. Then present it to the class:
  - Child trafficking
  - COVID-19
  - HIV/ADIS
  - Climate change and agriculture

1.4. What is computer?

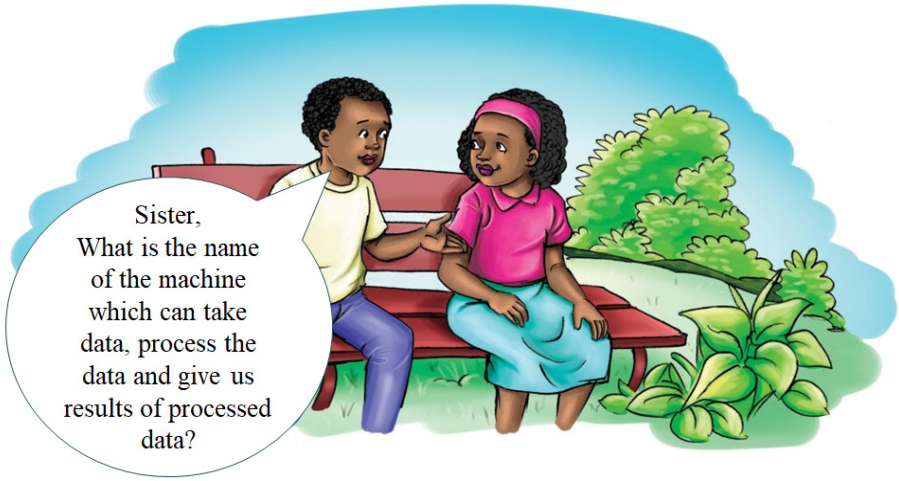


Figure 1.10: Definition of computer and its application

A computer is any calculating device or machine. But these days, computers process not only numbers but also texts and pictures. Therefore, the meanings of computers, nowadays, are broader than computing concepts.

Functions of a computer

The basic functions of a computer depicted in Figure 1.11 are entering, processing and producing processed data (information).

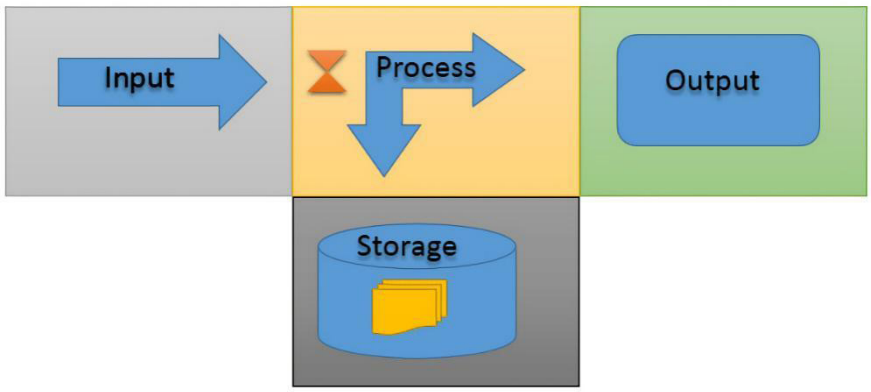
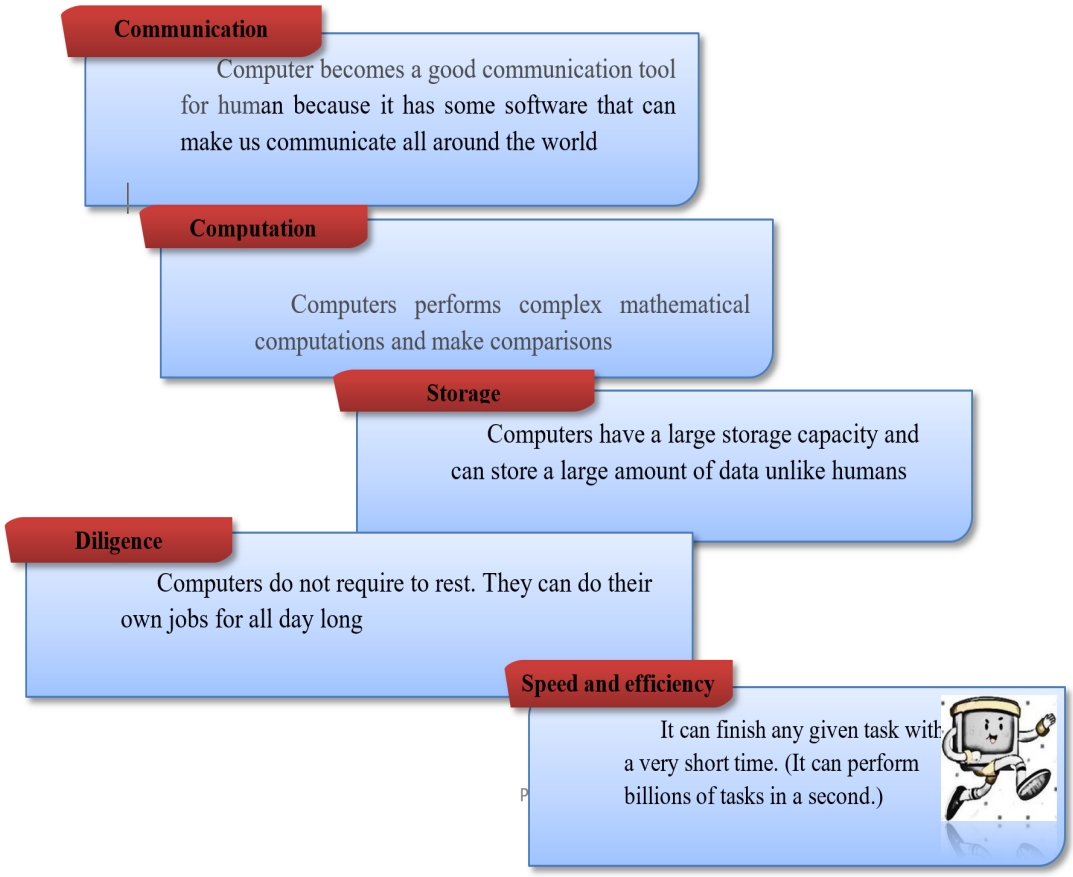


Figure 1.11. Four basic functions of computer

Characteristics of computer

We use computers for a variety of purposes as shown below.



Though computers allow us to do many things, there are a number of physical and emotional risks that will result in the overuse and incorrect use of computers. For example, if children play computer games too much, they may experience particular physical problems such as muscle and joint pain, overuse injuries of arms, wrist or hand and eyestrain.

Components of the computer system

A computer system, like a human being, can be viewed as a combination of body and mind. The computer system has two parts: hardware and software. In unit 2 and unit 3, you will learn more about hardware and software components of a computer system, respectively.

Summary

- Information Technology is the use of computers, storage, networking and other physical devices to create, process, store, secure, retrieve data and information.
- Information and communication technology (ICT) refers to all communication technologies, including the internet, wireless networks, cell phones, computers, software, video-conferencing, social networking , and other media applications and services enabling users to access, retrieve, store, transmit, and manipulate information in a digital form.
- There are five basic elements of ICT. These are data, information, user, communication, and technology
- Technology is a set of tools and machines created by humans
- ICT has a great impact on our daily lives. For example, it greatly contributes to education, communication, and entertainment.
- Computer is an electronic device that takes an input, processes it under a set of instructions called programs and produces an output.

Review Questions

Part I. Write TRUE if the statement is correct and FALSE if it incorrect.

1. Computer is only a calculating device or machine.
2. ICT tools cannot be used for entertainment.
3. ICT improves the teaching and learning system.
4. People use computers to make their job easier and faster.
5. Data by itself has a meaning.
6. Data is any type of representation of an object or an event.
7. Communication devices simply allow computers and various ICT systems to be connected to one another

Part II. Choose the best answer among the given alternatives.

1. An elements of ICT that has no meaning by itself is:

A. Information
C. Data
B. User
D. Technology

2. Which one of the following sectors can be supported by ICT?

A. Education
C. Health
B. Agriculture
D. All

3. The characteristics of a computer that refers to how fast a computer can perform a given task is:

A. Storage
B. Speed
C. Diligence
D. Communication

4. A processed data is called _____.

A. Information
B. Data
C. Input
D. Process

5. Which one of the following is the risk that we may face due to overuse of computers?

A. Eyestrain
B. Joint pain,
C. Overuse injuries of arms,
D. All

Part III. Write the correct answer in each of the spaces.

1. _____ refers to the development, maintenance, and use of computer software, hardware and networks.
2. Data representation could be in the form of _____, _____, _____, _____, _____.
3. _____stores data for later use in appropriate storage devices, and retrieve it whenever it is necessary.
4. _____ are people who design and operate the software, input the data, build the hardware and keep it running.
5. ICT stands for_____.
6. _____is an individual who has access to ICT and utilizes it.
7. _____ is the processed outcome of data.
8. _____is a set of tools and machines created by humans

Part IV. Discussion questions

1. Define the term computer.
2. What is the difference between data and information?
3. Write a short note on basic elements of ICT systems.
4. Explain the term technology and information technology.
5. Define information and communication technology (ICT)

UNIT

2

Computer Hardware

Unit Outcomes

At the end of this unit, students will be able to :

- *identify the hardware components of computer;*
- *identify functions of each hardware components;*
- *explain computer hardware.*



Overview

In this unit, students will learn about the major hardware components and categorize them in to input, processing, output and storage devices. Thus, students will explore the internal and external computer hardware components. Input devices are parts of computer hardware that are used to insert data into a computer system. The CPU is the brain of the computer which performs all arithmetic, logical and control operations. An output device is computer hardware that allows a computer to communicate the results of data processing to the outside world. A storage device is used to store data in a computer system.

2.1. Introduction to Computer Hardware

Brainstorming activity



Dear students, do you know what computer hardware is? Can you give us an example of computer hardware?

Computer hardware is the physical part of the computer that you can see and touch.

Computer hardware can be categorized based on the nature of their functions:

- Input devices
- Processing (Central processing unit)
- Output devices
- Storage devices

2.2. Input Devices

Input devices are parts of computer hardware that are used to insert data into computer system. Common input devices are:

- Keyboard
- Mouse
- Scanner
- Touch screen
- Light Pen
- Barcode reader
- Microphone
- Camera

Keyboard

is the most commonand widely used input device for entering data into a computer



Figure 2.1: Keyboard

Mouse

is another important tool for communicating with computers. Commonly known as a pointing device, allows you to point to things on the screen, click on them, and move them around.



Figure 2.2: Computer Mouse

Scanner

is used to convert a hardcopy document such as photographs to softcopy.



Figure 2.3: Scanner

Touch Screen

a touch sensitive screen is a pointing device that allows the user to interact with the computer by touching it.



Figure 2.4: Touch screen

Light pen

is a pointing device in the shape of a pen. It can be used to select a menu item or to draw on the monitor screen.



Figure 2.5: Light Pen

Camera

is used to capture photographs and save them in its memory.



Figure 2.6: Digital Camera

Barcode reader

A barcode is a pattern made up of different thickness lines. This technology allows for quick and error-free data entry into the computer. Barcode reader is used to read a barcode.



Figure 2.7: Barcode reader

Microphone

it is a device used to input spoken word as input data or commands.



Figure 2.8: Microphone

Activity 2.1

- List at least three types of input devices and discuss their functions in group.
- Please make a small group and match input devices to the tasks below.
    1. To capture a photo of your family
    2. To record and input your voice to the

2.3. Central Processing Unit (CPU)

Brainstorming activity



Dear students, do you know what CPU is?

CPU is the brain of the computer which performs all arithmetic, logical and control operations. It is responsible for all functions and processes. As illustrated in Figure 2.9, the CPU consists of three components: arithmetic-logic unit, control unit, and register.

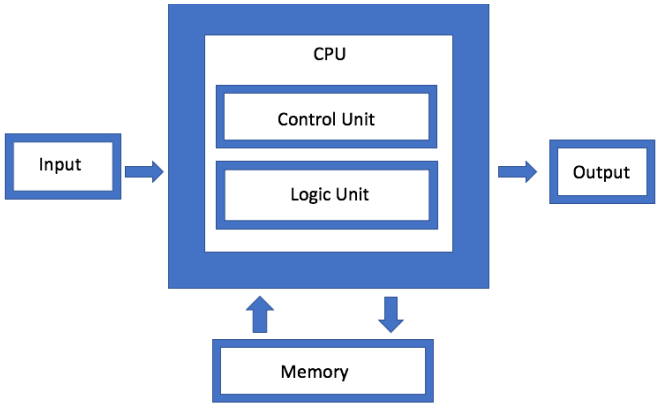


Figure 2.9: Components of CPU

Arithmetic-Logic Unit (ALU)

ALU is responsible for performing arithmetic and logical operations, and comparing data. Arithmetic calculation is used to perform addition, subtraction, multiplication and division whereas logical operation is used to compare numbers, letters, or special characters.

Control Unit

The control unit controls and directs the operation of the whole computer system.

Registers

Register is a special and a small high speed memory of CPU which is used to store temporary results and control information.

2.4. Output devices

An output device is computer hardware that allows a computer to communicate the results of data processing to the outside world. A computer's output device allows data to be easily understood by a human.

The following are some of the important output devices used in a computer.

- Monitor
- Printer
- Plotters
- Speaker

Monitor

is a device that displays information in pictorial or text form. The visual and graphics information generated by the computer is shown on the monitor via the video card.



Figure 2.10: CRT, LCD and LED Monitor

Printer

is a type of output device that prints data on paper. A hard copy is created when you print something.



Figure 2.11: Printer

Plotter

is an output device like a printer used to produce highly graphical pictures or posters.



Figure 2.12: Plotter

Speaker

Speaker is a hardware device that outputs sounds generated by the computer. It can be used to play music.



Figure 2.13: Speaker

2.5. Storage devices

A storage device is used to store data in a computer system. It can store data either temporarily or permanently. There are two types of storage devices: **primary storage device**, and **secondary storage device**.

Primary storage devices

Primary storage, also known as main memory, is the part of the computer that stores current data, programs, and instructions that can be accessed by the processor as needed. There are two common types of primary storage: Random Access Memory (RAM) and Read Only Memory (ROM)

RAM

RAM: is responsible for storing the instructions and data that the computer is using at that present moment in time. It is usually described as temporary (volatile) memory because its contents can be lost when the computer is turned off.

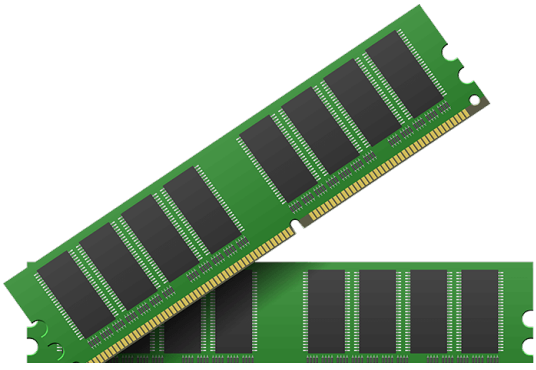


Figure 2.14: Random Access Memory (RAM)

ROM refers to computer memory containing permanent data. ROM stays active regardless of whether a computer is turned on or off.

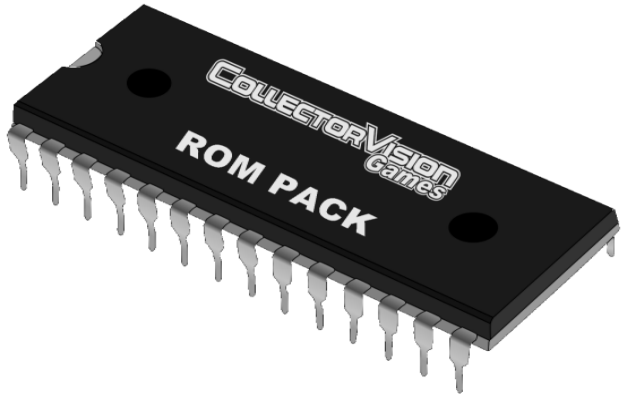


Figure 2.15: Read Only Memory (ROM)

Table 1: Differences between RAM and ROM

#	RAM	ROM
1	Data stored in RAM can be read and written.	Data stored in ROM can only be read.
2	Stores data temporarily.	Stores data permanently.
3	Has high-speed memory	Is much slower than the RAM

Secondary storage

Secondary storage stores data and information permanently. Any non-volatile storage device, whether internal or external to the computer, is referred to as a secondary storage device. Secondary storage devices can be used as input and output devices.

- Hard Disk
- Optical Disk
- USB flash disk
- Secure digital (SD) card

Hard disk

is the most common and usually largest data storage device in a computer system



Figure 2.16: Hard disk images

Optical Disk

is any computer disk that uses optical and laser technologies to read and write data. Some examples of optical disk include compact disc (CD) and digital video disc (DVD). CDs can store up to 700 megabytes (MB) of data and DVDs can store up to 8.4 GB of data.



Figure 2.18: sample Optical Disk images

USB flash disk

is used for storage, data back-up and transferring of computer files.



Figure 2.19: USB flash drive

Secure digital (SD) card is a type of removable memory card used to read and write data in a wide variety of mobile electronics and cameras.



Figure 2.20: Secure digital (SD) card

Activity 2.2

- Identify and explain the basic parts of computer hardware with examples.
- Discuss storage devices in group and present the different examples of primary and secondary storage devices to the class.

Units of data storage measurements: are used to express the size of the data that is going to be stored in our storage device. The smallest unit used for measuring data is a bit while a byte is used as the fundamental unit of measurement for data. Kilobyte (KB), megabyte (MB) and gigabyte (GB) are the commonly used data measurement units. Bit is a Single Binary Digit (1 or 0).

- One byte = 8 bits
- One kilobyte (KB) = 1,024 Bytes
- One megabyte (MB) = 1,024 Kilobytes
- One gigabyte (GB) = 1,024 Megabytes
- One terabyte (TB) = 1,024 Gigabytes

Summary

- Computer system can be divided into two parts: hardware and software
- Computer hardware is the physical part of the computer that you can see and touch
- Hardware can be classified as: input devices, central processing unit, output devices, and storage devices
- Input device is used to provide data to the computer system
- Common input devices are: keyboard, mouse, scanner, touch sensitive screen, light pen etc…
- The central processing unit (CPU) is the brain of the computer which performs all arithmetic, logical and control operations.
- Output devices are used to communicate and display the results of processed data to the user.
- The common output devices are: monitor, printer, plotter and speaker
- A storage device is used to store data in a computer system

Review Questions

Part I. Write TRUE if the statement is correct and FALSE if it is incorrect.

1. Secondary storage devices store data and information permanently.
2. Random Access Memory (RAM) is a permanent form of storage.
3. Microphone is commonly known as a pointing device, used to control the position of the cursor on the screen.
4. Control unit monitors the operation of the entire computer system.
5. Light pen is used to select a displayed menu item or draw pictures on the monitor screen.
6. The arithmetic logical unit (ALU) is used to store temporary results.

Part II. Choose the best answer among the given alternatives.

1. An output device used to listen sound from a computer is:
   A. Printer C. Speaker
   B. Plotter D. Microphone
2. A secondary storage device that uses optical and laser technologies to read and write data is:
   A. Flash disk D. All
   B. CD C. Hard disk
3. Which one of the following is an example of input device?
   A. Scanner C. Projector
   B. Printer D. Speaker
4. Parts of the CPU that helps to perform addition is:
   A. Arithmetic logic unit C. Control unit
   B. Register D. All
5. Primary storage used to store data permanently is:
   A. ROM C. Hard disk
   B. RAM D. CD

Part III. Write the correct answer in the space provided.

1. _____ is an output device, which is used to print highly graphical information on paper.
2. _____is a part of the CPU used to store temporary results.
3. The storage devices are classified as _____ and _____.
4. Computer systems can be divided into_____ and _____.
5. _____allows the user to enter data into the computer.
6. _____ is the brain of the computer.

Part IV. Discuss the following points.

1. Write the difference between input and output devices.
2. List at least three examples of output devices and explain them.
3. What is the central processing unit (CPU)?
4. Discuss different parts of the CPU.

UNIT

3

Computer Software

Unit Outcomes

At the end of this unit, students will be able to :

- *differentiate between hardware and software;*
- *explain computer software;*
- *explain application software and system software;*
- *discuss system software with example;*



Overview

In this unit, you will learn about system software and application software. This unit provides detailed description about system software and application software. Computers process data under the control of sets of instructions called computer programs. System software is a set of generalized programs that manage the resources of the computer such as the central processing unit, communication links, and peripheral devices. Application software also known as end-user program is designed to satisfy a particular need of a particular environment. A word processor is an application program that allows users to create, edit, and format documents.

In unit two, you have learned about computer hardware and its components. In this unit, you learn about computer software and its types.

3.1. Introduction to Computer Software

Brainstorming activity



- Do you know what computer is?
- Can you give any exmple of computer software?

Computer software is a collection of computer instructions or programs that tell the computer what to do and how to perform tasks. Computer hardware cannot perform any tasks without software. For example, without an operating system, we cannot start a computer.
The hardware is designed to accomplish a variety of tasks, and the software instructs the hardware on how to complete each task. Both computer hardware and software are interdependent, and neither can be used on their own.
There are two types of software:

- System software
- Application software

3.1.1. System software

System software is responsible for controlling, integrating, and managing the individual hardware components of a computer system. It also helps the user, hardware, and application software to interact and function together. System software does not perform specific tasks such as document creation.
System software includes operating systems, utility software, and language translators.
Operating System: is the most important program that runs a computer. Every computer system runs under the control of an operating system. Operating systems are responsible for providing various essential services such as initial loading of programs,

supervision of the input/output devices, and file management. Microsoft Windows is the most commonly used operating system in Ethiopia. Figure 3.1 illustrates what a Microsoft Windows operating system looks likes.



Figure 3.1: Microsoft Windows operating system

Utility programs: The purpose of utility software is to manage matters associated with the analysis, configuration, performance improvement, and maintenance of a computer system. In other words, this software is usually used to support computer infrastructure and manage system resources. Some examples of utility software programs include backup software, data recovery, and virus protection.

Language translator: is software that translates from one computer language to another. It is a generic term consisting of various programs that serve as compilers and translators to develop a program in a number of different computer programming languages.

3.1.2. Application software

Application software, also known as end-user program, is designed to satisfy a particular need of a particular environment. The common application programs are word processor, spreadsheet, database management, graphics design, and presentation software. Figure 3.2 shows some of the common examples of application software.

- **Word processing:** is used to create, edit, format, and save text documents, for example, Microsoft Word, WordPer fect, and WordPad. You can also use it to write letters, textbooks, exams, worksheets and other documents.



Figure 3.2: MS-WORD, WordPerfect, WordStar, and WordPad icon images

- **Spreadsheet:** is used to calculate and analyze data in a tabular form. FoxPro and Microsoft excel are examples of spreadsheet. You can use them to prepare a payroll and a roster.

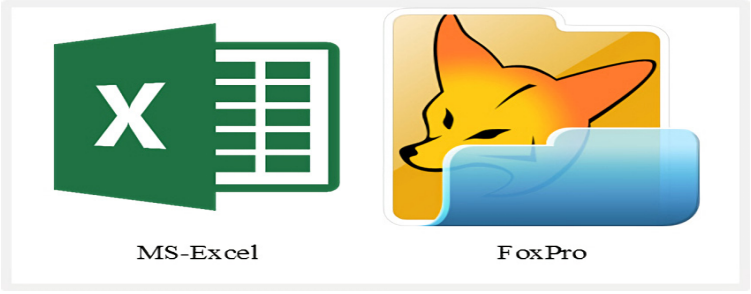


Figure 3.3: MS excel and Fox pro Spreadsheet icons

- **Database management:** serves to create a computerized data table, to insert records, make queries, analyze data, and append data into it. Microsoft office access is a basic example of database management software.



Figure 3.4: MS Access Database management Software

- **Graphics software:** provides the user to create, edit, and format graphical images. AutoCAD is one example of graphical software. You can use AutoCAD to design buildings, bridges, houses and others.



Figure 3.5: AutoCAD graphics software

- **Presentation software:** provides the user to create, edit, and format presentations. Microsoft PowerPoint is an example of presentation software.



Figure 3.6: presentation application software

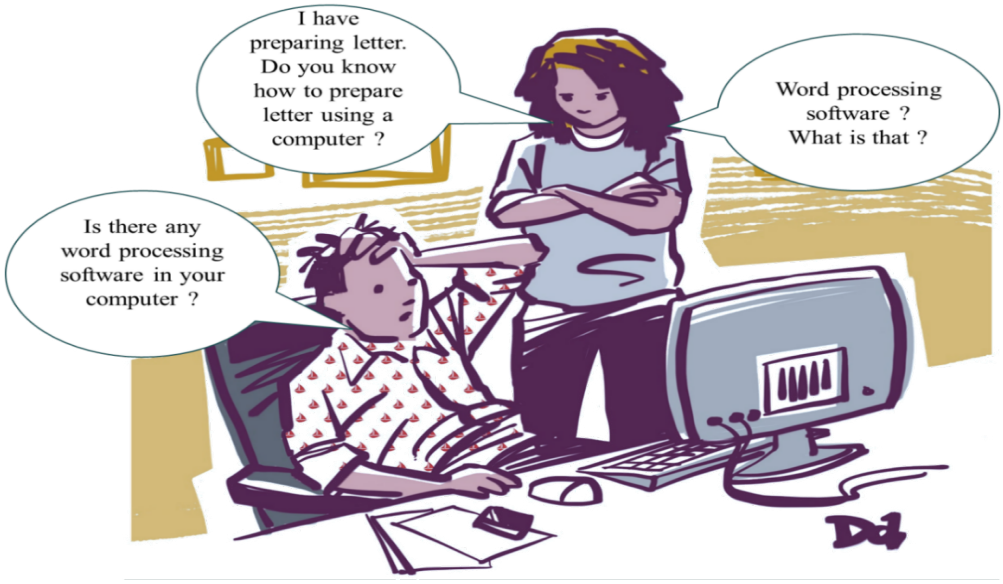
Table 2: The differences between system software and application software

System Software	Application Software
It is designed for general purpose.	It is designed for a specific purpose.
It starts running when the system is powered on and stops when it is powered off.	It starts when the user begins using it and ends when the user stops it.
Users do not interact with system software as it is running in the background.	Users always interact with application software while doing different activities.
Examples include Microsoft Windows	Examples include Microsoft Word

Activity 3.1

- Discuss the different examples of system software and application software in groups and present it to your class.

3.2. Overview of Word Processing



A word processor is application software that allows users to create, edit, and format documents. It also allows you to type, edit, and save a text. In addition, you may use this tool to add images, tables, and charts to your documents.

Compared to the traditional pen or pencil-based writing on-screen text creation, word processer is more readable and clear. It reduces the amount and type of errors and editions.

3.2.1. Opening word processor

As discussed in section 3.1.2, there are different word processors. Microsoft Word is one of the most commonly used word processors

provided by Microsoft Company.

To start Microsoft Word 2016, use one of the given options:

1. On the **Start** menu, click **All Programs** and from the Microsoft Office folder,select **Microsoft Word 2016;**

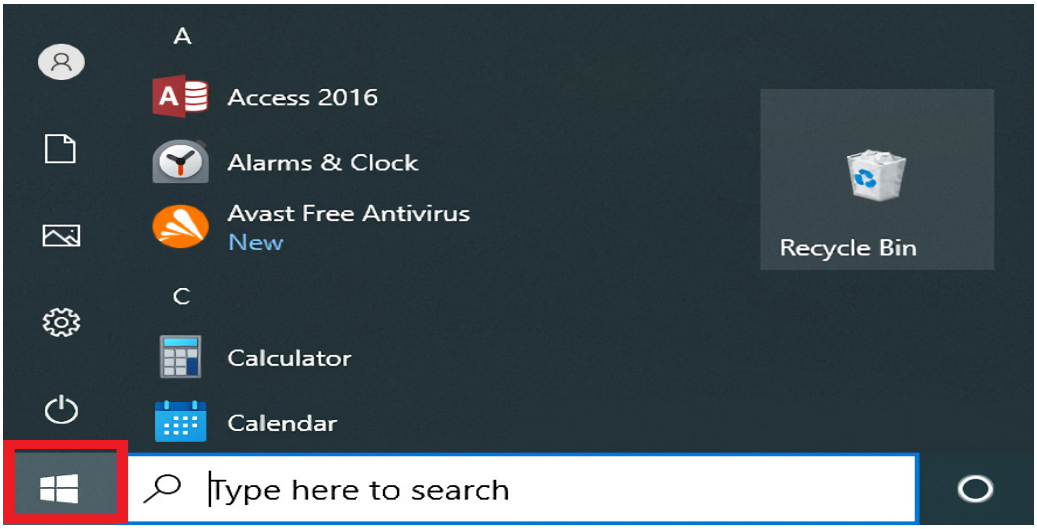


Figure3.7: Start MS Word Processor

2. Use the **Search** command and enter the term **word** in the search field and select
Microsoft Word 2016 from the given search results;

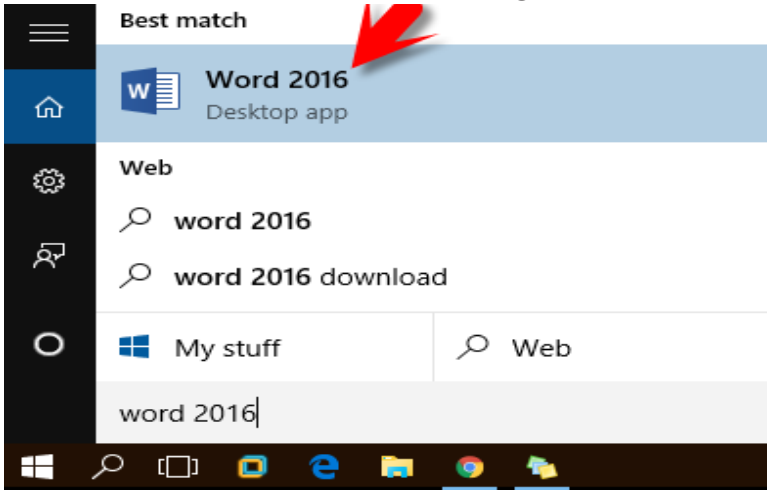


Figure3.8: Start Microsoft Word Processor using Search

3. Double-click the **Microsoft Word 2016 application shortcut** usually found onthe computer's desktop.



Figure 3.9: Start Microsoft Word Processor using shortcut

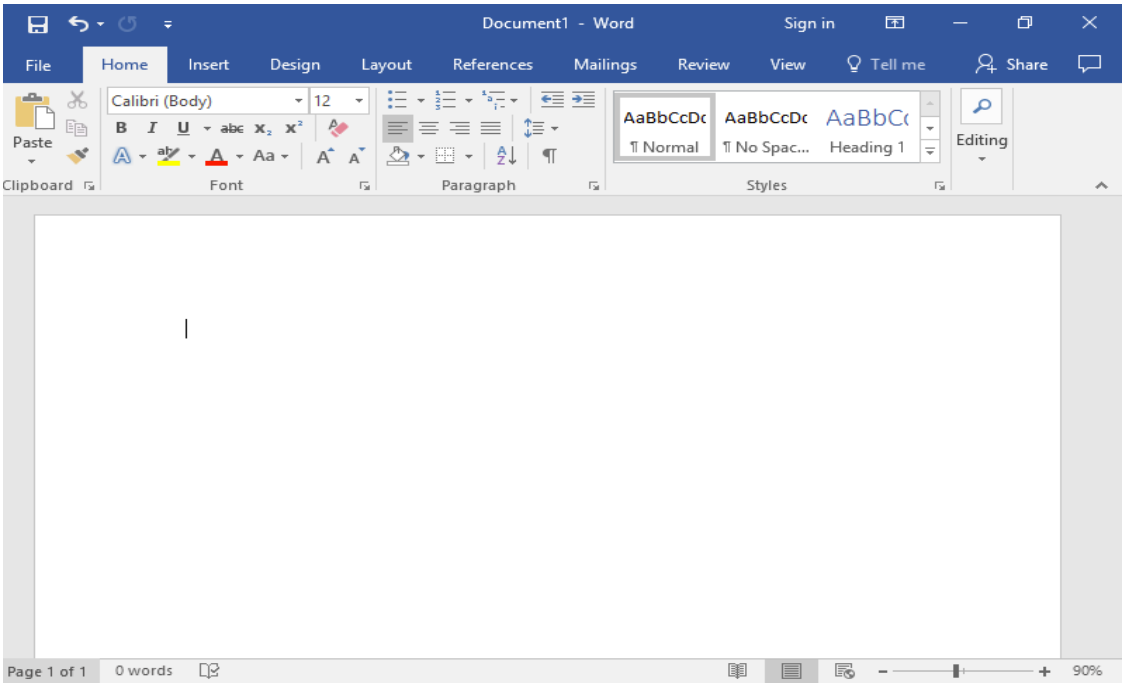


Fig. 3.10 Microsoft word blank window

I. Microsoft Office Word Environment

These given options will open and display a blank document which is ready for text to be entered.

Figure 3.11 shows the screen elements which should appear when you start Microsoft Word.

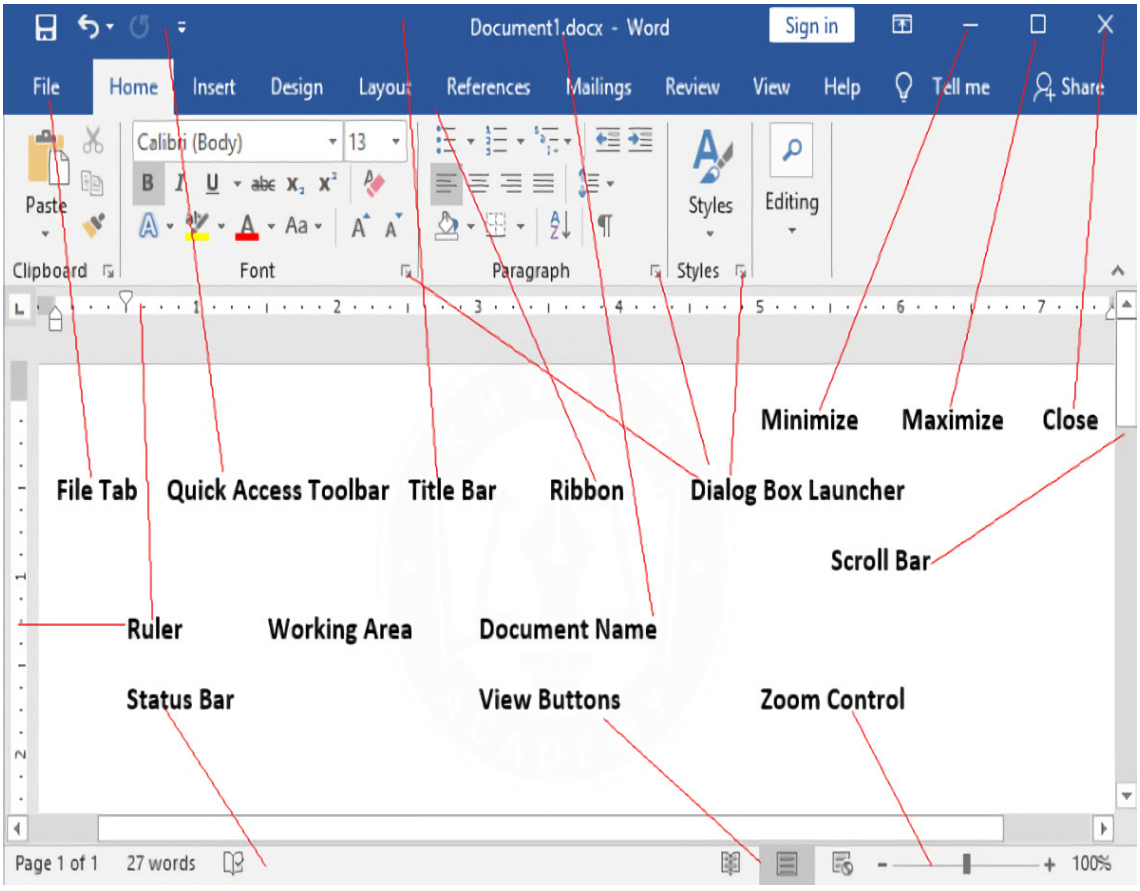


Figure 3.11: The Microsoft Word 2016 screen elements

- **Title bar:** This lies in the middle and at the top of the window. Title bar shows the program and document titles.
- **Menu bar:** consists of the major menu items such as Home, Insert, Page Layout and others, which can be used to insert table, bullets, and page numbers.
- **Quick access toolbar:** is a customizable toolbar that displays common commands. By default the Save, Undo and Repeat icons appear on the toolbar.

- **Ribbon:** shows the most commonly used button associated with a certain task. It stretches across the top of the application and is divided into tabs for specific activities.
- **View buttons:** are used to switch between different view-modes of documents: Print Layout, Full Screen Reading, Web Layout, Outline and Draft.
- **Rulers:** show the positions of margins, tabs, indents and table columns on the page.
- **Help:** can be used to get word related help anytime we like.
- **Zoom control:** allows you to zoom in and out of a document to view it at a selected zoom level.
- **Status bar:** displays the document information as well as the location of insertion point.
- **Document area:** is the area where we can type texts and insert pictures.
- **File tab:** contains essential document settings such as Save, Save As, Open, Close, Info, Recent, New, and Print.

When you move the mouse around the screen, the mouse symbol could look like any of the following:

1. A mouse pointer: means you can click on the item such as folder, and icon.
2. A timer: it displays when the computer is busy. At this time, you need to wait until the computer finishes the current task and comes back to normal pointer.
3. Finishing insertion point: when you click the mouse, the insertion point will flash if the text is entered or deleted.
4. I-beam: shows where your mouse is and when it hovers over the text.

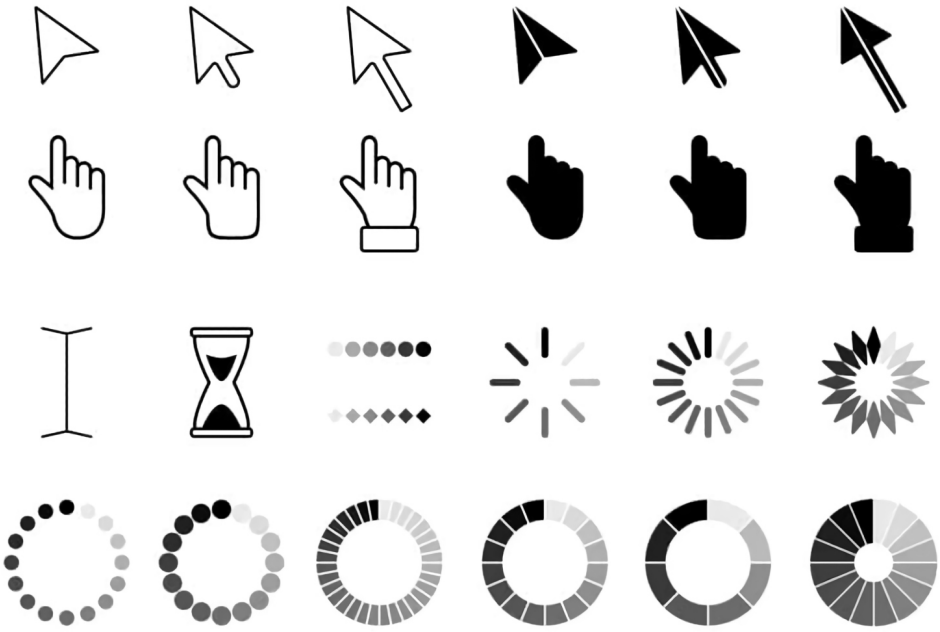


Figure 3.12.The mouse symbol

3.2.2. Saving word document

After creating and inserting texts in a word document, we need to save it to use it later. If you want to save a document for the first time, you can follow the steps below:

1. Go to File > Save As
2. Select the location of your drive, so you can get to your document from anywhere.
3. You can also save to another location in the list like This PC > Documents. Or select Browse to pick any location including the Desktop.

Follow the procedures on how to save a document as depicted in Figure 3.13

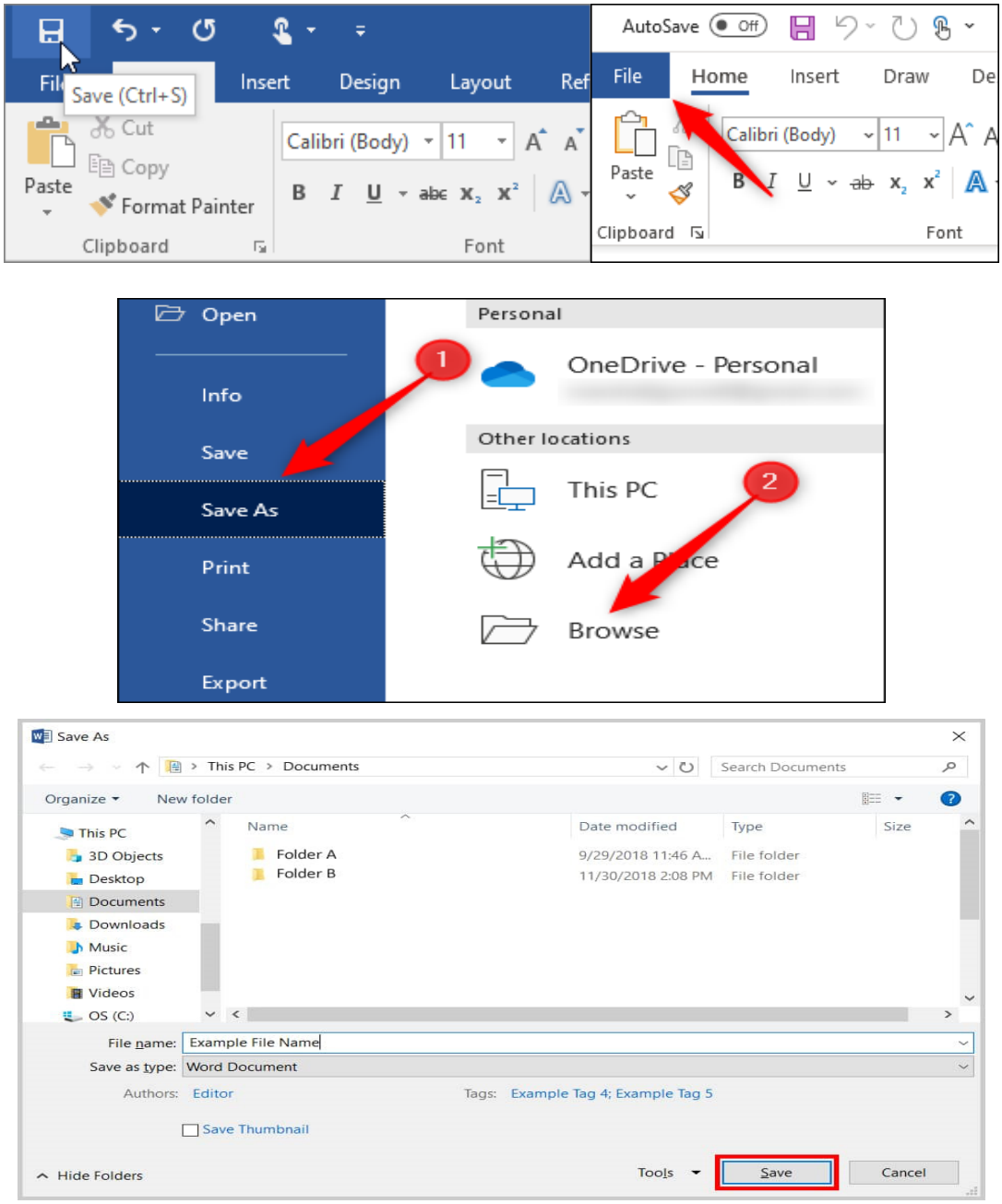


Figure 3.13: Steps to save the Microsoft word document

Microsoft Word automatically adds the .docx suffix to the document name once we saved it.

3.2.3. Closing word processor

Once you have saved your word document and completed your task, you need to close the application. You can use either of the following

options to close Microsoft Word application as shown in Figure 3.14.

- **Click** the Close button placed on the top right corner of window's title bar
- **Open** the File menu and then choose the Exit command

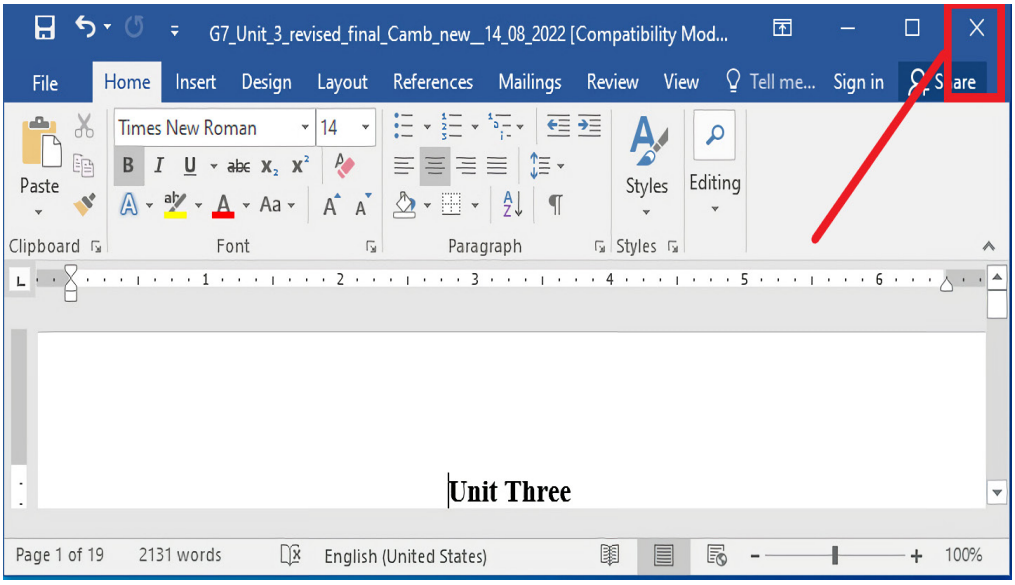


Figure 3.14: Steps to close the Microsoft word document

Activity 3.2

- Open a Microsoft Word from your computer and write your Full name. Then save the document and finally close the application.
- Using Word processer, write a text about yourself. Write your full name, grade and section at the top of the document and also include the text "what is your favorite food?"
- Save the document created in question 2 on your desktop using your first name.
- Close the Word Help dialogue box by clicking on close at the top-right of the Help dialogue box.
- Discuss the differences between writing using pen and pencil and writing using word processing

Summary

- Computer software is a collection of computer instructions or programs that tell the computer what to do and how to do tasks.
- Computer hardware and software works together and neither can be used on its own
- There are two types of computer software: system software and application software
- System software is responsible for controlling, integrating, and managing the individual hardware components of the computer system.
- Application software helps the user to accomplish specific tasks.
- Operating systems, utility software and programming languages are some examples of system software.
- Word processing, spreadsheet, database management, graphics software are some examples of application software.
- A word processor is an application program that allows users to create, edit, and format documents.

Review Questions

Part I. Write TRUE if the statement is correct and FALSE if it is incorrect.

1. Computer hardware and software can work independently.
2. View button is used to switch between different view modes for a document.
3. System software does not accomplish specific tasks to the user.
4. Application software is designed to accomplish a particular task.
5. Spreadsheet is an example of system software.

Part II. Choose the best answer among the given alternatives.

1. _____ is an application software used to write and edit text.

   A. Spreadsheet C. Word processor

   B. Database management D. Graphics editor

2. Which one of the following is not an example of application software?

   A. Utility software C. Operating system

   B. Language software D. All

3. The screen element of Microsoft Word that consists of the major menu items such as Home, Insert, Page Layout and others is:

   A. Title bar C. Toolbar

   B. Menu bar D. Task bar

4. _____ is an example of system software.

   A. Microsoft word C. Spreadsheet

   B. Microsoft Windows D. All

5. Which one of the following statements is true?

   A. Application software is designed for solving a specific task.

   B. System software is designed for solving a specific task.

   C. Utility software is designed for a general purpose.

   D. All

Part III. Write the correct answer in each of the following spaces provided.

1. Using _____ application program you can add pictures, tables, and charts to your documents.
2. _____ is responsible for controlling, integrating, and managing the individual hardware components of a computer system.
3. _____ is a collection of computer programs or instructions that tell the computer what to do.
4. Computer software can be classified as _____ and _____.

Part IV. Discussion points.

1. Define computer hardware and software.
2. What are the main screen elements of Microsoft Word processor?
3. Write the steps to create and save a word document in MS-Word.
4. Explain the differences between system software and application software.