

MEETING ONE ASSIGNMENT

Abdullah Azzam Rabbani

10240038

Abstract

This document explains the basics of computers. A **computer** is a machine that takes in information, follows instructions to work on it, and shows results through devices like screens or printers. It has four main parts: **input devices** (like keyboards or mice to enter data), the **processor** (the "brain" that does calculations), **output devices** (like monitors or speakers to show results), and **storage** (like hard drives to save information).

The text also describes how computers evolved over time. Early computers used **vacuum tubes** (big, slow parts that made machines as large as houses). Later, **transistors** (smaller, faster parts) replaced tubes, making computers smaller. Modern computers use tiny chips (**ICs** and **VLSI**) packed with millions of parts, making them powerful and compact.

Attachment

1. **What was the word “computer” firstly recorded and what does the word “computer” mean?**

a machine that can accept data and process it according to a stored program of instructions and then give the result via output devices.

2. **What are the four main parts of the computer?**

The four main parts are:

- Input device
- Processor
- Output device
- Storage

3. **Can a “calculator” be classified as a computer? Give your reason**

Yes, a calculator can be classified as a computer. It follows a stored program

to process input (numbers) and produce output (results), aligning with the definition of a computer provided in the document.

4. **Explain in your own words, how can a computer work?**

A computer works by accepting data through input devices (e.g., keyboard), processing it using the processor, producing results via output devices (e.g., monitor), and optionally storing the data or results in storage devices (e.g., hard disk).

5. **Based on the slides, what is an input device?**

An input device is any device used to input data into a computer, such as a keyboard, mouse, microphone, or webcam.

6. **What was the first processor used many years ago? Explain it**

The first processors used vacuum tubes, which were large electronic devices housed in glass tubes. These tubes enabled computation but were bulky and required significant space (e.g., first-generation computers were as large as a house).

7. **Explain the second generation of a computer.**

The second generation replaced vacuum tubes with transistors, which were smaller (peanut-sized) and more efficient. This reduced the size of computers significantly compared to the first generation.

8. **What is the function of a “transistor”?**

A transistor acts as a semiconductor device that amplifies signals or opens/closes circuits. In computers, it controls current flow, enabling faster and more efficient processing compared to vacuum tubes.

9. **Based on your comprehension, what are mini and mainframe computers?**

While not explicitly mentioned in the document, mainframe computers likely refer to large, early-generation machines (e.g., first-generation vacuum tube computers), while mini computers could describe smaller systems from later generations (e.g., transistor or IC-based computers).

10. **What does VLSI stand for? And what does it consist of?**

VLSI stands for **Very Large Scale Integration**. It consists of hundreds of thousands of electronic components packed onto a single semiconductor chip, enabling advanced computation in compact devices.

