

Introduction to Computers

Class 8 - Nepal Curriculum

Function of Computers

- Computers work on the basis of Input, Process, and Output cycle. This is also known as the IPO cycle:
- 1. Input
- 2. Process
- 3. Output

History of Computers

- Historically, humans used tools like fingers, stones, and symbols for calculations.
- Later, mechanical devices like the abacus were invented to simplify calculations.
- The development of computers includes many stages, from basic tools to modern devices.

Mechanical Devices

- Examples of early computing devices include:
 - 1. Abacus: Used for addition and subtraction.
 - 2. Napier's Bones: A manual calculating tool.
 - 3. Slide Rule: Performs multiplication and division.
 - 4. Pascaline: First device to perform basic arithmetic operations.

Stepped Reckoner & Jacquard's Loom

- Stepped Reckoner: Developed by Gottfried Wilhelm von Leibniz, it could perform addition, subtraction, multiplication, and division.
- Jacquard's Loom: A weaving machine using punch cards, an important step toward modern computers.

Visual Representations

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Figure 1. 3D printing technology and its applications in various fields.