Definition of Computer

- A **programmable machine** that manipulates data based on instructions.

Generations of Computers

1. **First (1946-1958)**: Vacuum tubes, punch cards.

2. **Second (1959-1964)**: Transistors, assembly language.

3. **Third (1965-1970)**: Integrated circuits,

4. **Fourth (1971-today)**: Microprocessors,

5. **Fifth (Future)**: AI,

10 Questions & Answers

1. **What is a computer?**

   o A programmable machine that manipulates data based on instructions.

2. **What was the earliest computing device?**

   o **Abacus** (invented in 2400 B.C.).

3. **Who invented the first mechanical computer?**

   o **Charles Babbage** (Difference Engine, 1822).

4. **What was the significance of the Jacquard Loom?**

   o Used **punched cards** to automate weaving, inspiring early computing.

5. **Which was the first electronic general-purpose computer?**

   o **ENIAC** (1946).

6. **What replaced vacuum tubes in second-generation computers?**

   o **Transistors**.

7. **What technology defined the third generation of computers?**

   o **Integrated circuits (silicon chips)**.

8. **What major advancement came with fourth-generation computers?**

- Microprocessors and GUIs.

9. What is the focus of fifth-generation computers?

- Artificial Intelligence (AI) and self-learning systems.

10. Who is considered the first computer programmer?

- Ada Lovelace, who wrote algorithms for Babbage's Analytical Engine.