

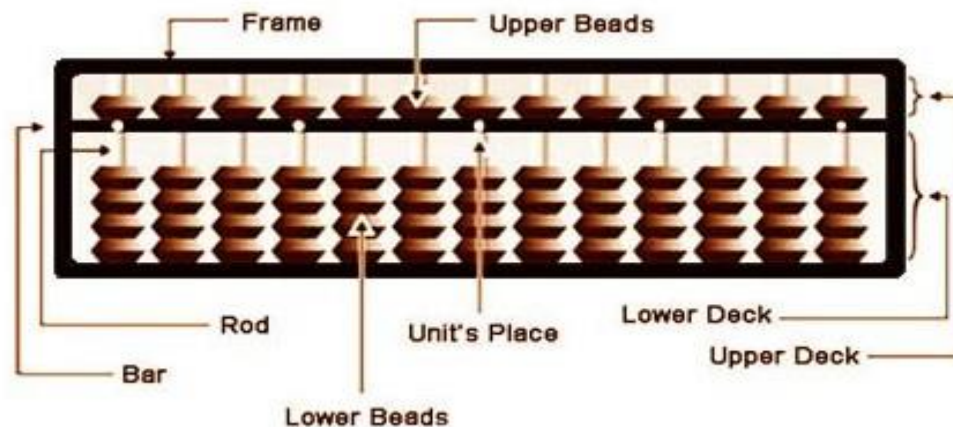
Computer Application in Education

CC-05

Santipur B.ed College

History of Computers

- The Abacus: The earliest reference to abacus dates back to 2700-300 BCE in Mesopotamian civilization. Used for Simple calculations like addition, subtraction etc.
- Teaching arithmetic to blind students.



Contd.

- Napier's Bones- In 1616, Sir John Napier made this device to perform addition, subtraction, multiplication and division.
- The numbers carved on bones or on strips of wood.



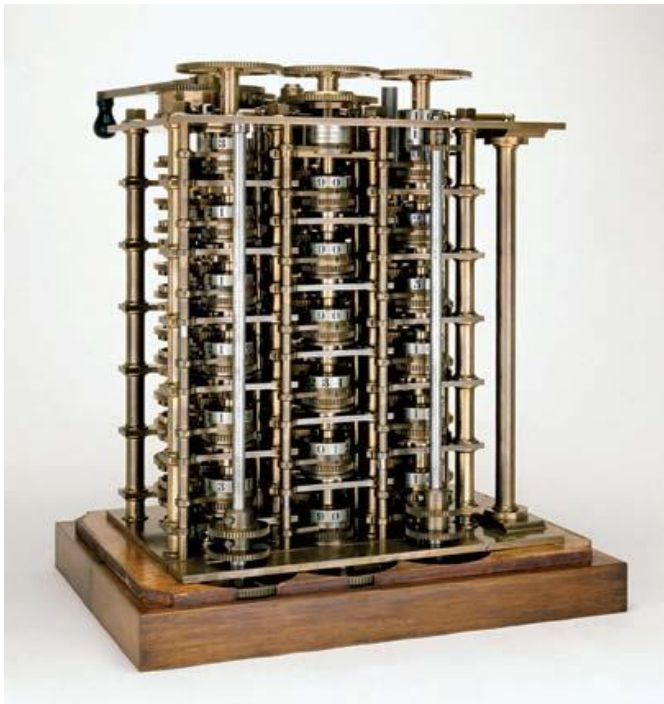
Contd.

- Pascaline- It was the first mechanical computer and was invented by Blaise Pascal in 1641 which was used for addition, subtraction, multiplication and division of numbers up to hundreds and thousands.

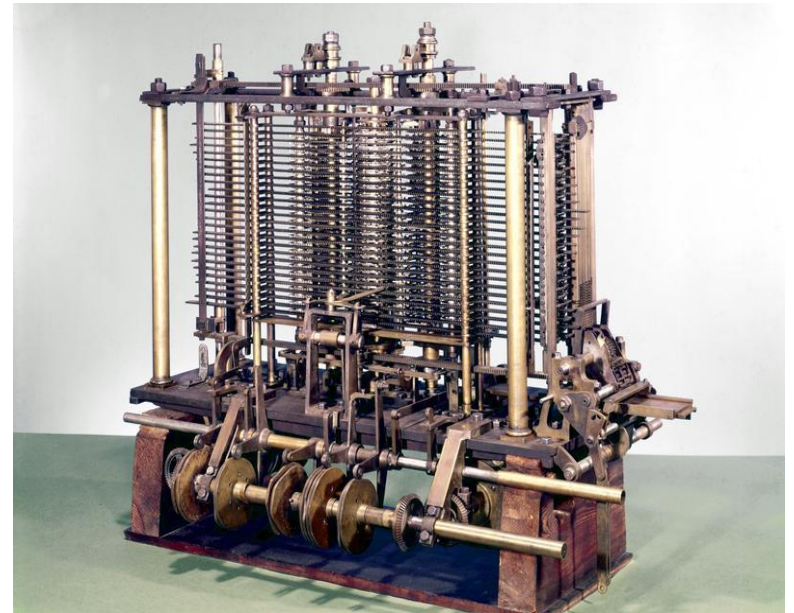


Contd.

- Difference Engine- invented by Charles Babbage in 19th century. It was first mechanical computer.



- Analytical Engine- Invented by Charles Babbage. He is also known as father of modern computers.



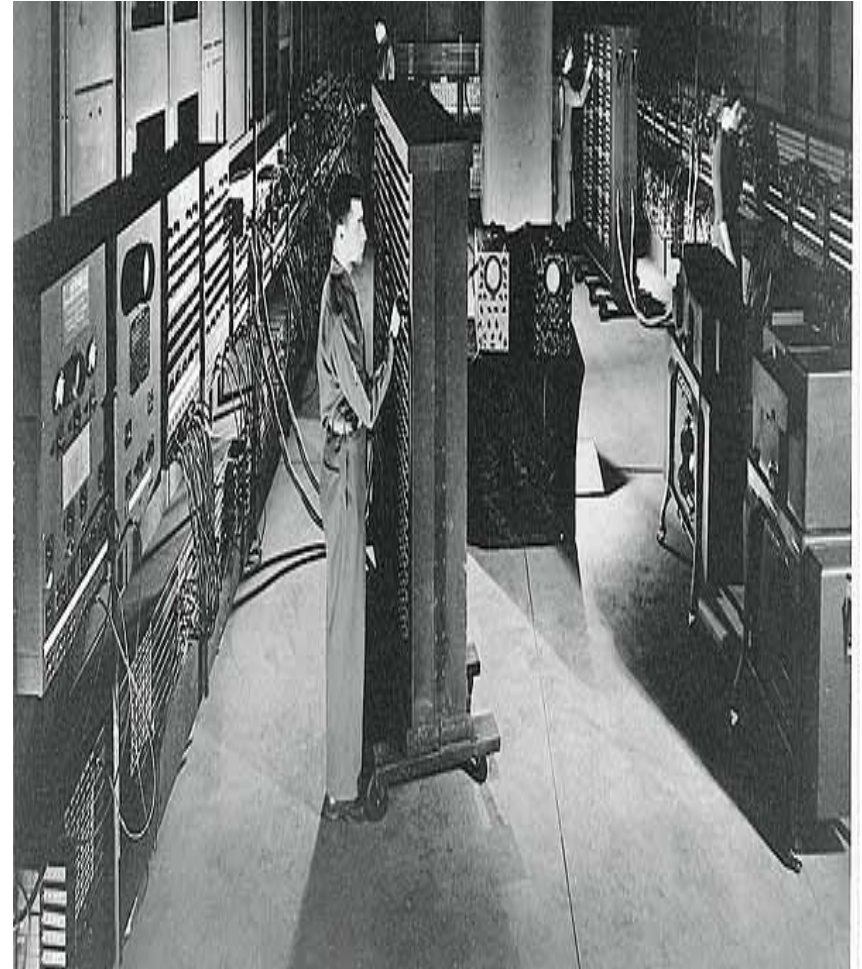
Evolution of Computers

- First Generation Computers-
- They use Vacuum Tubes
- Very large in size with small storage & very expensive.
- Inputs are based on punched cards and paper tapes.
- Mark-I- designed by Howard H. Aiken in 1944.
- 15 metre long. It was the fully automatic calculator.
- Drawback- Slow, takes 3-5 seconds per calculation.



Contd.

- ENIAC (Electronic Numerical Integrator and Computer)- Developed by John Presper Eckert & John W. Mauchly in 1946.
- It was the first fully electronic digital computer.
- Consisted 18,000 vacuum tubes, occupied an area of 63 sq. meters and weighed more than 27,000 kgs.
- It can perform large arithmetic operations within 200 micro seconds.
- Didn't have stored programmms



Contd.

- UNIVAC-I: Developed by J. Presper Eckert & John Mauchly in 1951
- Weight approx. 13,000 kgs.
- Occupied an area of 35.5 sq. meters.
- It was first commercially available computer
- It can handle both text & numeric data



Contd.

- Second Generation Computers (1959-1964)-
- They are most faster & smaller
- Transistors are used as main component.
- Programming languages like FORTRAN & COBOL are introduced.
- IBM 1401 & RCA501

