

# What is a Computer ?

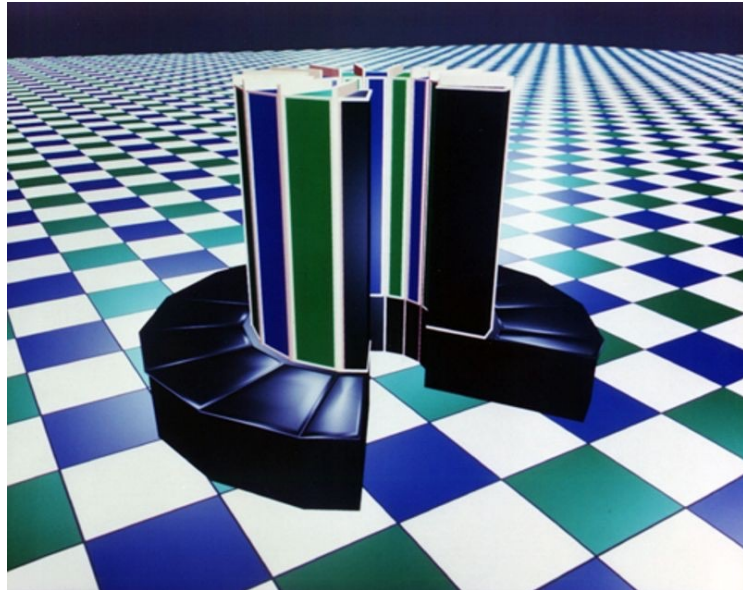
- Is a **machine**
- Takes some “**input**” (data)
- Does some “**computation**” (algorithm)
- Generates some “**output**” (information/knowledge/result)



Calculator



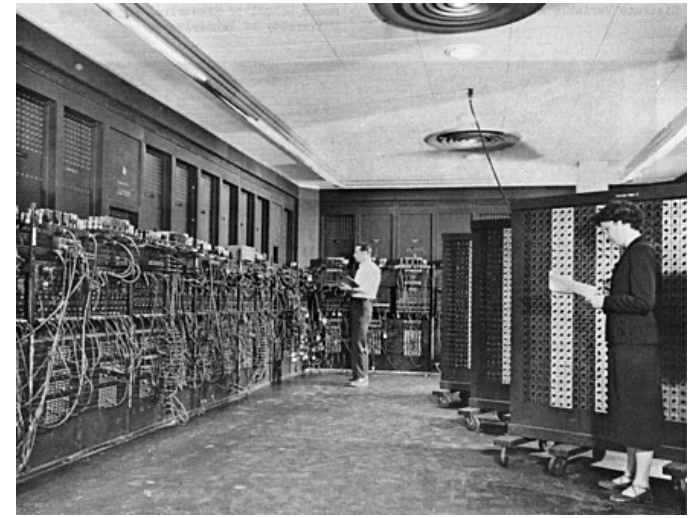
Silk Loom (Picture from Varanasi)



Cray



"Smart"phone



ENIAC [from 1947-55]



"smart" watch

# “Programmable” Computer

- “Software”
  - Set of instructions to the computer to achieve a goal
  - Input -> “Software” -> Output
- The “Hardware” of the computer is used by the “software” to generate results

# A “program”

- Goal: To make a roti
- Input: Atta, Water, Salt
- Hardware: Hands (to knead), Bowl, Roller-pin and Rolling board, Tawa, Stove, ...
- Software ?

# Recipe ...

- Make Dough
- Roll Rotis
- Cook Roti

# What about programming a computer?

- Let's try out something very simple
- A program that takes your name, and prints out how are you doing

# Before we can program

- We store programs in **files**
- Environment
  - **Directory**
  - **Subdirectory**
  - **Files**
- Editing programs
  - Editor – **nano**, pico, vim, emacs, xemacs, ...
- Programming language (English ?!)
  - **Python 3.6**

Let's Program !