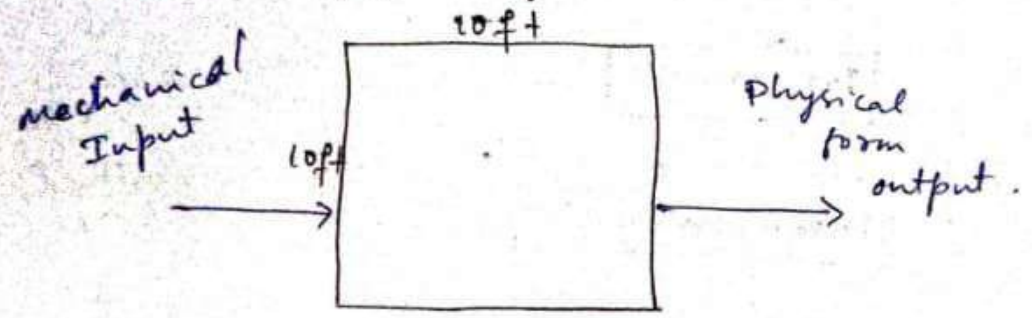
Day 1 16-08-2025 Saturday.

→ Basics of computer science

- ☑ Evolution of computers
- ☑ parts of computer and how a computer works.
- ☐ what is an operating system?
- ☐ How to see various system and process info on your PC?
- ☐ what is software? How it is run? How it works.

(1) Evolution of computers.

* In olden days computer's were 10/10 ft.
* It can occupy a full room. It is a mechanical machine



* It will take 0 & 1 as a Input (Binary language is used)
* These machine are used to perform high end calculations

Eg: - Moon mission
- Space mission
} more calculations. [Mathametical calculations]

= General purpose computer.

✓ specific computer's were designed like they were desided in manufacturing you need use them for These specified setting itself. [they were setting the * objective * goal * purpose] we could not use them for any other purposes

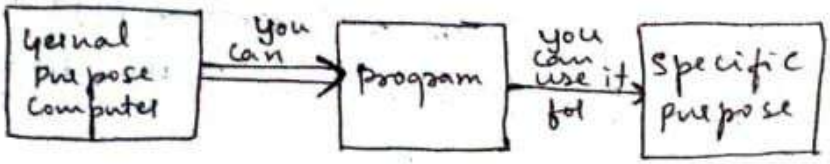
Eg for Specific purpose 1. Pen
2. Fan

It computers — space related computers
— scientific calculation
— Business related computers etc.

the cost of manufacturing were high.

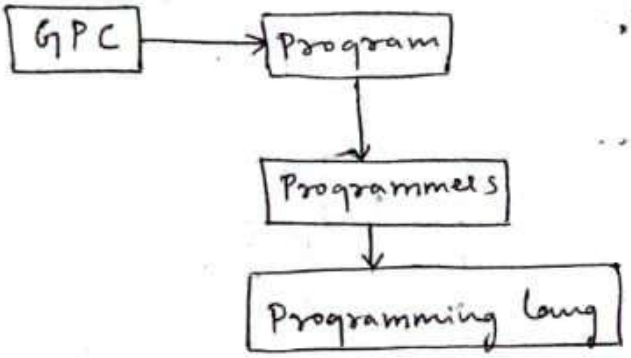
* The main beauty (or) skill (or) main feature of GENERAL PURPOSE COMPUTER is

- they designed this computers for Multi purpose



- when this has come, Smaller business & Schools ect

↓
It helped



∴ more than 9000 programming language

∴ Mobile phone
Laptop
Desktop
Personal computers
} General purpose processor.

Eg: lego blocks.

* In computers

1. Microprocessor [8085, 8086]
2. Series of Intel Based processor [Intel X86]
3. ARM (Advance RISC Machine)

↓
[Reduced Instruction Set Computing]

From a Evolution in Single Room to Mobile phone, watches, Laptop, PC etc.

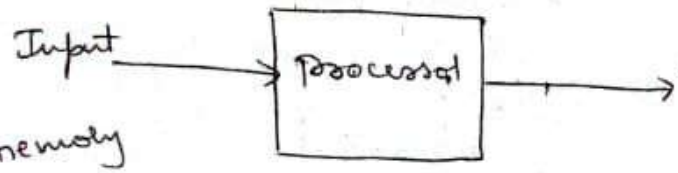
world GDP
5% → IT
10% < 10 years

(2) parts of Computer.

- In the CPU Cabinate

1. Motherboard : * Main circute in computer
* All the parts are connected to this
* Horizontally placed.

2 processor : * It will run the program what we write
* For the different Input given by different Input device & the processor will process the Input & gives the ~~op~~ output for different output devices



permanent memory

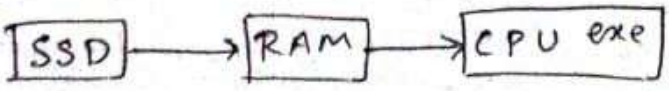
3 Hard disk drive : The Data will be Stored here

HDD
SSD

* Program will read from the SSD
* the Motherboard contains a port which will be connected to printer
* Then the printer will printer the document.

4. RAM (Random Access Memory) :

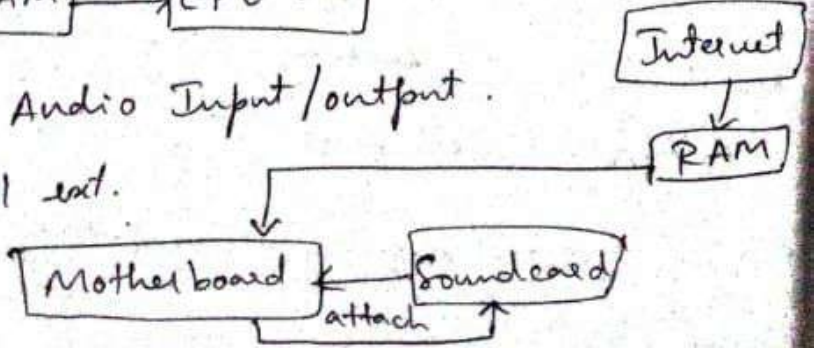
* Called as Temporary memory
* RAM — 2, 4, 8, 16, 32, 64 ....



Eg: OTP

5. Sound Card : Audio Input/output.

Eg: Zoom Call ext.
youtube



6. optical drive : * used to read CD

But now not used.

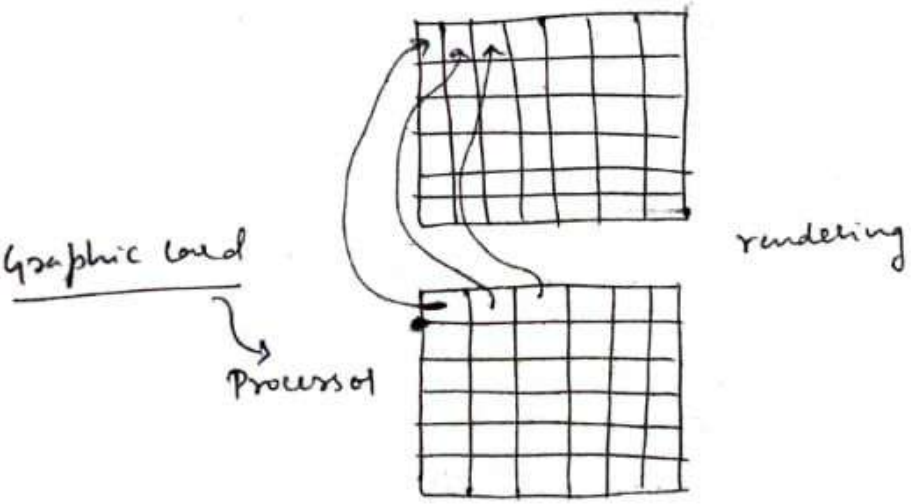
* Instead we are using penDrive now a days

7. Power unit (or) SMPS → Switched Mode Power Supply.

Alternate current (AC) → will be given to SMPS and SMPC will convert it to Direct current (DC) And give it to the components

(Basically SMPS is a power supplier to all the components present)

8. Graphics card : * It is actually designed for gaming purpose



* Combine all the rendering and create the final image and sent to the working screen

* then we can feel the realistic the game we are playing.

* then they starting using in machine learning & Artificial Intelligence.

Eg: Nvidia company is famous for Graphics

= Accelerometer : Used when is Auto rotation of Mobile Screen

= Transceiver : Mobile signal send - recieve

Raspberry pi : * Size (credit card)

* one of the Smallest computer

* you can run your Code here