Tutorials ①

① Explain about the computer generations and write down the technologies used.

* Abucus which is founded by chinese is considered as the first ever machine to perform a task. The charles Babbage discovered the first Mechanical computer.

Generation   Technologies used.

* First generation   —   Vaccum tube based.
   (1946 - 1959)

* Second generation   —   Transistor based.
   (1959 - 1965)

* Third generation   —   Integrated circuit based.
   (1965 - 1971)   (Ic)

* fourth generation   —   VLSI microprocessor based.
   (1971 - 1980)

* Fifth generation   —   VLSI microprocessor based.
   (1980 onwards)   * Artificial Intelligence based.

* Vaccum tubes are electronic devices that control the flow of electrons in a vaccum. It is used as a switch, amplifier or display screen in many older models of televisions etc.

Generation	Technology Used.
First Generation.	* Vaccum Tube. * Machine Language * Main memory — Magnetic tapes and magnetic drums. * Input / output devices — Paper tapes and punched cards. * speed and size — Very slow and very large * Ex - IBM 650, IBM 701, ENIAC, UNIVAC I etc.

Generations	Technology used.
Second Generation.	* Transistor. * Programming language :- Machine, assembly language * Memory : Magnetic core and magnetic tape/disk * Input /output : Magnetic tape, punched cards * power and size : smaller in size, low power consumption generates less amount of heat * Ex :- PDP-8, UNIVAC 1107, CDC 3600 etc.
Third Generation.	* Integrated circuits (ICs) * High-level language * Large magnetic core, magnetic tape /disk. * Input /output : Magnetic tape, monitor, keyboard, printer etc. * ex :- IBM 360, etc.
fourth Generation	* Very-large scale integration (VLSI) and micro processor (VLSI has thousands of transistors on a single microchip.) * Semi conductor memory (such as RAM, ROM etc) * Input / output devices :- pointing devices, optical scaning, keyboard, monitor, printer etc. * IBM PC, STAR 1000, APPLE 11, APPLe Macintosh etc
Fifth Generation.	* Based on AI, Uses large scale Integration technology and parallel procossing method. * Language /prog — understand human / natural language. * portable and small in size. * Track pad, touch screen, pen, speech input, light scanner, printer, keyboard, monitor, mouse etc * Ex :- Desk tops, laptops, tablets, smartphones etc.