

# COMPUTERS AND ITS PART

CHAPTER-I (CONTINUE...)

CLASS-V

RATNADEEP DAS , PRT(COMPUTER)

AIR FORCE SCHOOL BAGDOGRA

**HELLO CLASS V  
WELCOME BACK  
THIS IS YOUR COMPUTER SIR.  
SO TODAY WE WILL LEARN A  
NEW CHAPTER AND THE NAME  
OF THE CHAPTER IS  
COMPUTERS AND ITS PART**



**FIRST QUESTION TO YOU  
ALL...**

**CAN YOU IMAGINE A  
WORLD WITHOUT  
COMPUTERS?**

**DIFFICULT TO THINK ABOUT !  
WHY IS IT SO?**

**BECAUSE WE ARE SOME  
HOW DEPENDENT ON  
COMPUTER FOR WORK AND  
ENTERTAINMENT. RIGHT....**



**THE ACTUAL THING IS,  
COMPUTER IS FAST ,  
ACCURATE , VARSATILE ,  
CAN DO MILLIONS OF  
CALCULATIONS PER SECOND  
etc.**

**BASED ON ALL THOSE  
ASPECTS , IT BECOME  
IMPOSSIBLE FOR US TO  
STOP USING IT.**



**NEXT QUESTIONS.**

**WHAT ABOUT MOBILE PHONE ,  
XEROX MACHINE , ATM MACHINES  
,WASHING MACHINES .THEY ALSO  
USE COMPUTER TO RUN?**

**HMMMMM,  
ANSWER IS ...**

**YES,  
THEY HAVE EMBEDDED  
COMPUTER SYSTEM  
ATTACHED IN THEM. THAT  
ARE SPECIFICALLY USED IN  
THAT DEVICE ONLY.**



**THEREFORE...  
COMPUTERS ARE USED  
EVERYWHERE IN THIS  
DIGITAL ERA.  
STUDENTS ...  
NOW YOU FIND 5  
EXAMPLES EACH.**

**THAT'S WHY WITHOUT  
COMPUTER ITS HARD TO  
BELIEVE THAT THERE  
WILL BE A EASY LIFE.**

**SO  
COMPUTER MAKES OUR LIFE  
SIMPLER AND EASIER &  
WITH FEW CLICK WE CAN  
COMPLETE COMPLEX TASK.**

**TODAY WE WILL COVER..**

- 1. WHAT IS COMPUTER?**
- 2. HARDWARE & SOFTWARE**
- 3. EXAMPLES OF HARDWARE  
COMPONENTS.**

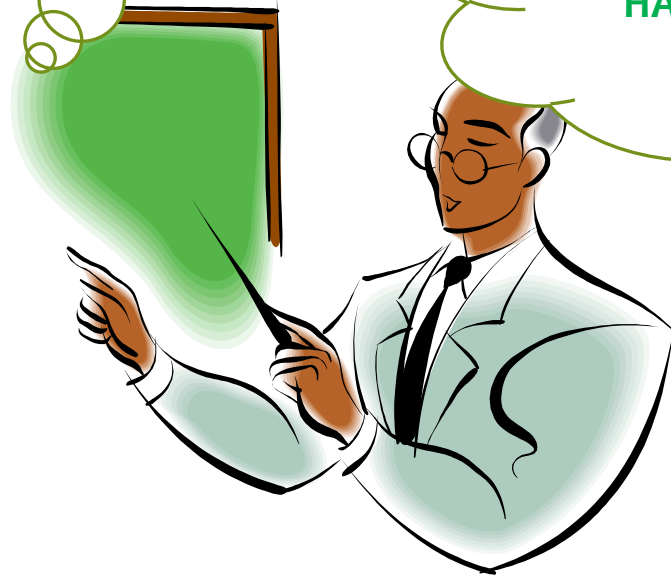


# WHAT IS COMPUTER

- \* Computer is an electronic device that takes input , process it and produces output.
- \* It is not intelligent but can handle instructions give by us.
- \* It is accurate and can do fast calculation.
- \* It can handle complex accounting work and can maintain databases
- \* It can convert data into information.

**THESE ARE THE REASON BASED ON  
WHICH COMPUTER POPULARITY  
INCREASES DAY BY DAY... RIGHT  
STUDENTS?**

**NOW WE WILL LEARN AND  
DIFFERENTIATE BETWEEN  
HARDWARE & SOFTWARE.**





# DIFFERENCES

## HARDWARE

- \* It can be seen and touched.
- \* Without hardware , computer cannot start or load Operating system.
- \* Example –Input , output ,storage & processing devices.

## SOFTWARE

- \* It's a program that cannot be touched but can be seen .
- \* Every application or program we work in the computer is a software.
- \* Example – Windows 10 , Microsoft Office etc.

OK... TO SUM UP ALL ...  
SOFTWARES ARE THE PROGRAMS OR  
APPS  
&  
HARDWARE ARE THE COMPONENT OF  
COMPUTER THAT CAN BE SEEN &  
TOUCHED.



**NOW WE CAN SAY THAT WITHOUT  
SOFTWARE & HARDWARE COMPUTER  
CANNOT RUN.**

**NOW WE WILL DISCUSS EXAMPLES OF  
HARDWARE COMPONENTS OF  
COMPUTER.**



# HARDWARE COMPONENTS

## INPUT DEVICES –

- \* Helps in inputting data into computer.
- \* Examples-
  - \* Keyboard
  - \* Mouse
  - \* Scanner
  - \* Digital Camera
  - \* Joystick

# HARDWARE COMPONENTS

## OUTPUT DEVICES –

- \* Data entered is processed and the final result comes in the form of output..
- \* Examples-
  - \* Monitor
  - \* Printer
  - \* Speakers
  - \* Plotters

# HARDWARE COMPONENTS

## STORAGE DEVICES –

- \* It saves data and the programs for future use.
- \* Examples-
  - \* Floppy Disc
  - \* CD / DVD
  - \* Pen drives
  - \* Internal / External Hard Disk

# HARDWARE COMPONENTS

## MEMORY-

- \* It helps in storing immediate data for processing.
- \* Examples-
  - \* RAM (Random Access Memory)
  - \* ROM (Read Only Memory)
  - \* Cache Memory

TO SUM IT UP  
WE INPUT DATA WITH KEYBOARD / MOUSE ,  
CPU PROCESS IT AND FINALLY RESULT COMES  
IN THE MONITOR .

AND IT FOLLOWS STEPS LIKE...

**INPUT → PROCESS → OUTPUT**

**AND FOR PROCESSING STORAGE &  
MEMORY DEVICES ARE USED.**





TODAY WE WILL LEARN ABOUT  
MICROPROCESSOR  
PRINTER  
SCANNER  
MODEMS  
IN HARDWARE COMPONENTS  
OF COMPUTER.



# MICROPROCESSOR

1. MICRO MEANS VERY SMALL.
2. IT CONSTITUTE OF SMALL-SMALL CHIPS OF COMPUTER PARTS JOINED TOGETHER TO PERFORM A SPECIFIC PROCESS / TASK.
3. IT PERFORM ARITHMETIC ( CALCULATIONS ) & LOGICAL (DECISION MAKING LIKE  $A > B$ ) OPERATIONS.
4. A NORMAL MICROPROCESSOR PERFORMS ADDITION , SUBTRACTION , MULTIPLICATION AND DIVISION.
5. IT IS A PART OF CPU.
6. ITS SPEED IS CALCULATED IN GHz.



Home

Find a setting

System

Display

Sound

Notifications & actions

Focus assist

Power & sleep

Battery

Storage

Tablet mode

Multi-tasking

Projecting to this PC

Shared experiences

# About

- Account protection
- Device security

[See details in Windows Security](#)

## Device specifications

Device name	DESKTOP-SH1MUTL
Processor	Intel(R) Celeron(R) CPU N2830 @ 2.16GHz 2.16 GHz
Installed RAM	4.00 GB (3.89 GB usable)
Device ID	48451C18-C283-459F-B226-46B9B577A75E
Product ID	00327-60000-00000-AA541
System type	64-bit operating system, x64-based processor
Pen and touch	No pen or touch input is available for this display

Rename this PC

## Windows specifications

Edition	Windows 10 Home Single Language
Version	1903
Installed on	12/26/2019

Finding out how many cores my processor has



# PRINTER

1. A PRINTER IS A DEVICE THAT ACCEPTS TEXT AND GRAPHIC OUTPUT FROM A COMPUTER AND TRANSFERS THE INFORMATION TO PAPER.
2. A COMPUTER PRINTER IS A PIECE OF HARDWARE FOR A COMPUTER.
3. TYPES OF PRINTER
  - **LASER PRINTERS.**
  - **INKJET PRINTERS.**
  - **DOT MATRIX PRINTERS.**
  - **3D PRINTERS**

QUALITY OF PRINTING IS MEASURED IN DPI (DOT PER INCH) & PPM(PAGES PER MINUTE).

## **LASER PRINTER**



## **INKJET PRINTER**

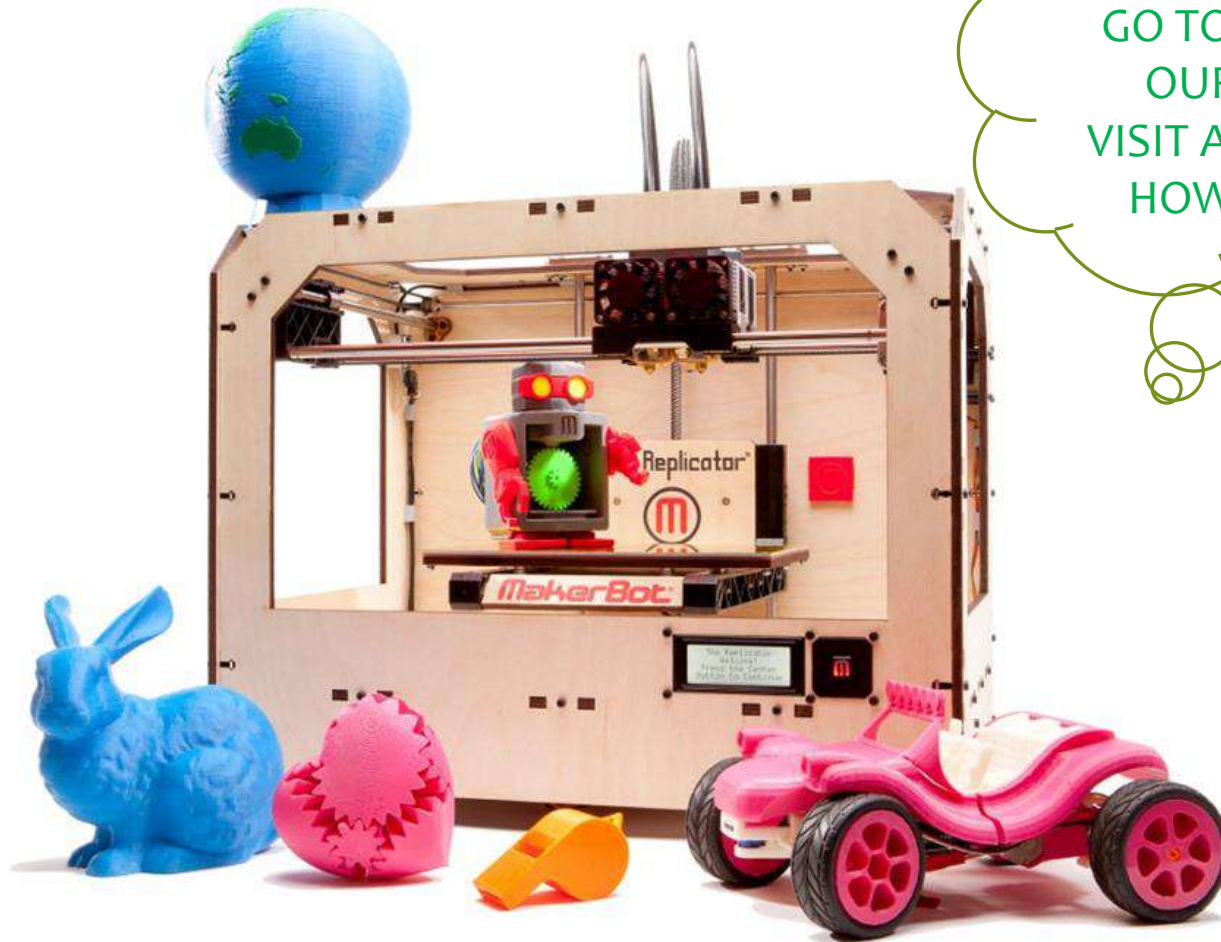


## **DOT MATRIX PRINTER**



## 3D PRINTER

WANT TO SEE REAL  
3D PRINTER!!!  
GO TO **ATL LAB** OF  
OUR SCHOOL.  
VISIT AND ANALYSE  
HOW IT WORKS



# SCANNER

1. A SCANNER IS A DEVICE THAT CAPTURES IMAGES FROM  
PHOTOGRAPHIC PRINTS  
POSTERS  
MAGAZINE PAGES  
AND SIMILAR SOURCES  
FOR COMPUTER EDITING AND DISPLAY.
2. IT DIGITIZE THE PRINTED MATERIAL.



# WANT TO SEE HOW SCANNER WORKS

CLICK ON THE VIDEO LINK -  
<https://youtu.be/MaduYkgN4l8>





# MODEM

1. MODEM STANDS FOR MODULATOR & DE-MODULATOR.
2. MODEM HELPS TO CONNECT A NETWORK IN OUR PC / LAPTOP.
3. MODEM IS GENERALLY USED WHEN ONE WANTS TO ACCESS INTERNET SERVICE PROVIDED BY THE INTERNET SERVICE PROVIDER (ISP) THROUGH THEIR TELEPHONE LINE OR CABLE CONNECTION.



**TODAY WE WILL LEARN  
ABOUT  
SOFTWARES  
TYPES OF SOFTWARE  
&  
THEIR EXAMPLES**



# SOFTWARE

- ❑ It is a program that perform various operation.  
Or  
Software are the instruction/ given to computer for solving a given task.



**THEREFORE , WITHOUT  
SOFTWARE , THE COMPUTER  
HARDWARE CANNOT WORK  
ALONE.**

**HARDWARE WILL BE A DUMB  
PIECE OF METAL WITHOUT  
SOFTWARE.**

# TYPES OF SOFTWARE

1. SYSTEM SOFTWARE
2. APPLICATION SOFTWARE
3. UTILITY SOFTWARE



**WE WILL DISCUSS ABOUT  
EACH TYPE IN OUR NEXT  
SLIDE.**

# SYSTEM SOFTWARE

It is a type of computer program that is designed to run a computer's hardware and application programs. Examples are:- WINDOWS 7 , WINDOWS 10 , LINUX etc.

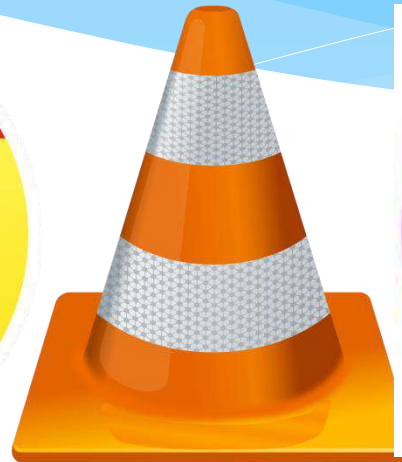


**STUDENTS , DO YOU KNOW ..**  
**WINDOWS 7 , WINDOWS 10 ,**  
**WINDOWS XP , LINUX - ALL**  
**THESE ARE CALLED AS**  
**OPERATING SYSTEM .**



# APPLICATION SOFTWARE

It is a program or group of programs designed for users. Examples includes MS OFFICE, a web browser, a media player, a file viewer, a console game or a photo editor.



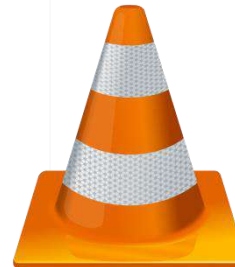
STUDENTS , DO YOU  
KNOW . THE NAME OF  
FOLLOWING  
APPLICATION  
SOFTWARE?



**MICROSOFT OFFICE -**  
IT CONSIST OF MS  
WORD , MS EXCEL ,  
MS POWERPOINT  
etc.



**GOOGLE CHROME-**  
IT'S A WEB  
BROWSER.



**VLC MEDIA PLAYER-**  
IT'S A VIDEO FILE  
PLAYER.



**PICASSA-**  
IT'S A PICTURE/  
IMAGE EDITOR.



# UTILITY SOFTWARE

It is software designed to help to analyse, configure, maintain a computer. It is used to support the computer infrastructure. Example are Disk Defragmenter , Antivirus , Junk file Cleaner.



## **Meaning**

**Configure** –Organise , Construct , Shape.

**Analyse** – Investigate , Examine , Study

**Infrastructure**- overall operation of computer

STUDENTS , DO YOU KNOW . THE NAME OF FOLLOWING UTILITY SOFTWARE?



**DISK  
DEFRAGMENTOR –IT  
ARRANGES ALL THE  
FILES IN THE  
HARDDISK AND  
INCREASES  
COMPUTER SPEED.**



**ANTIVIRUS-  
IT QUARANTINE THE  
VIRUS AND WORMS**



**DISK CLEANER-IT'S  
CLEAN TEMPORARY  
JUNK FILES.**



**DISK REPAIR-  
IT CHECK THE  
HARDDISK FOR ANY  
ERROR AND REPAIRS  
IT.**

STUDENTS ,ALONG WITH ALL THOSE SOFTWARE TYPES. I WOULD LIKE TO EXPLAIN DRIVER SOFTWARE AND EDUCATIONAL SOFTWARES.



**DRIVER SOFTWARE**—IT ALLOWS THE COMPUTER TO WORK WITH ADDITIONAL HARDWARE DEVICES.  
**EG. GRAPHICS DRIVER , AUDIO DRIVER , ETHERNET DRIVER.**



**EDUCATIONAL SOFTWARES**—THESE ARE SPECIFICALLY CREATED TO HELP STUDENTS IN THEIR STUDY BY PROVIDING THEM WITH STUDY CONTENT & VIDEO.

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**THANK YOU STUDENTS.**  
**HOPEFULLY YOU UNDERSTOOD**  
**COMPUTER SOFTWARE**

**WE ARE FINISHED WITH THE**  
**CHAPTER NOW.**  
**MEET U NEXT TIME.**

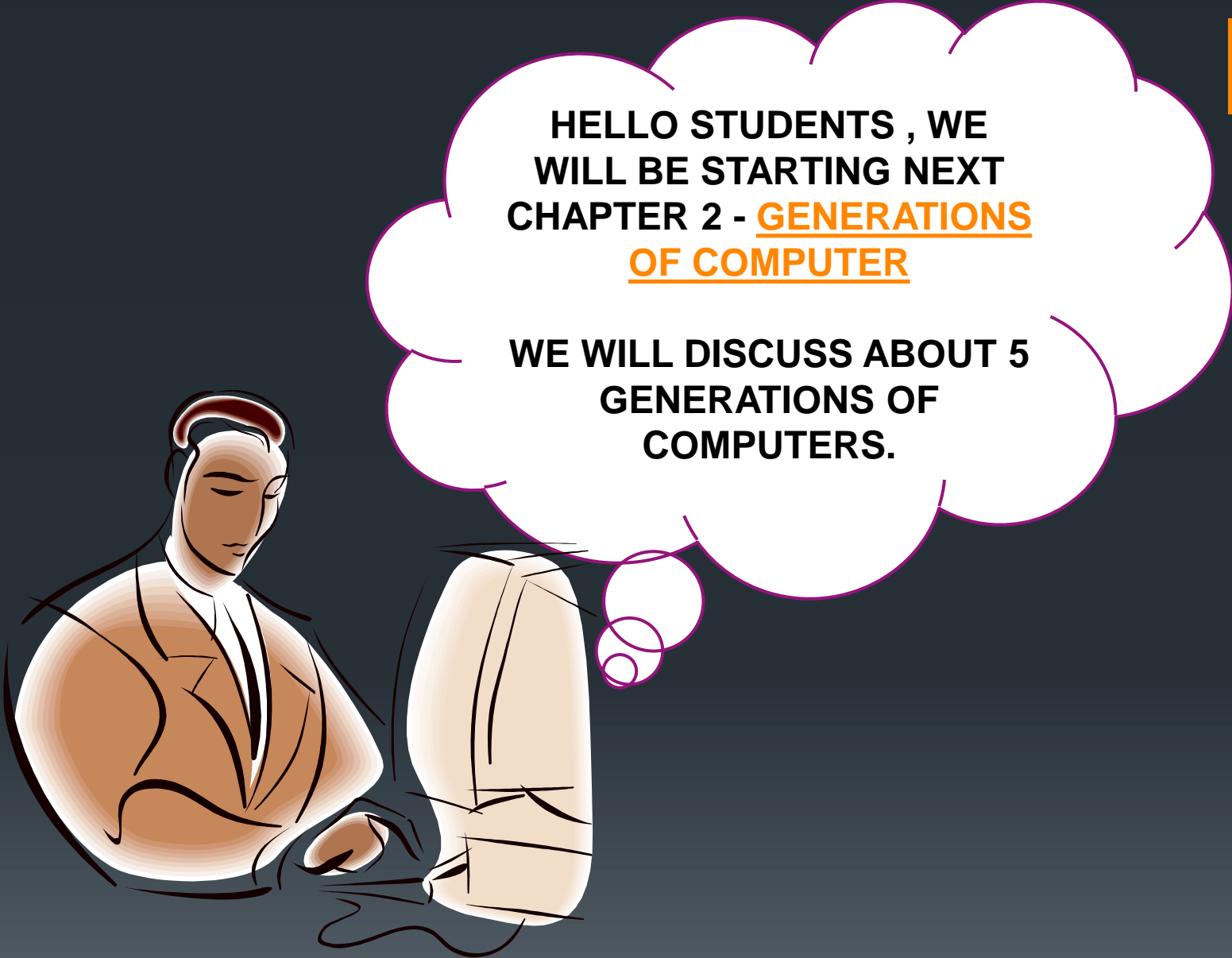


# GENERATIONS OF COMPUTER

CLASS –V  
CHAPTER – 2

PRESENTED BY :

RATNADEEP DAS –PRT(COMPUTER)  
AIR FORCE SCHOOL BAGDOGRA



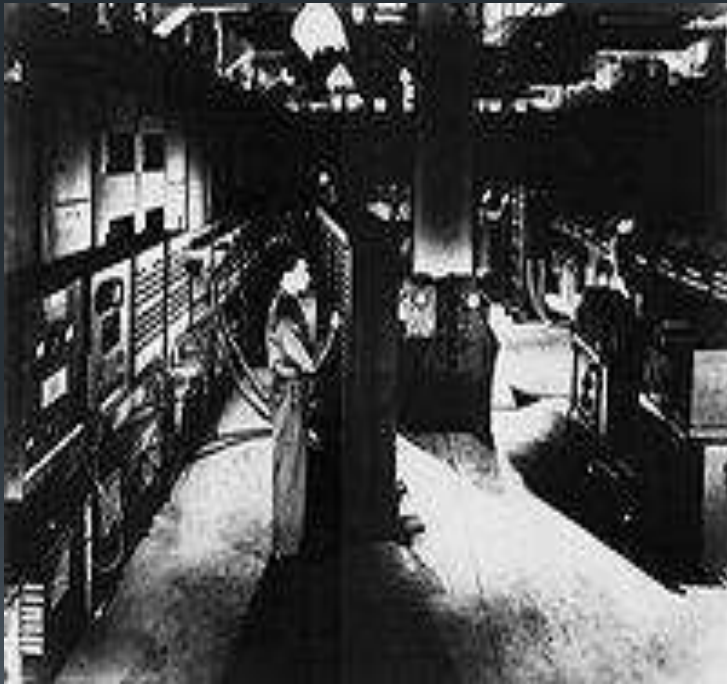
HELLO STUDENTS , WE  
WILL BE STARTING NEXT  
CHAPTER 2 - GENERATIONS  
OF COMPUTER

WE WILL DISCUSS ABOUT 5  
GENERATIONS OF  
COMPUTERS.

# First generation computers (1940-1956)

- i. The first computers used vacuum tubes for circuitry and magnetic drums for memory.
- ii. They were often big and taking up entire room.
- iii. First generation computers understand only machine language.
- iv. They were very expensive to operate.
- v. Uses lot of electricity and produces lot of heat, which was often the cause of malfunctions.
- vi. The UNIVAC and ENIAC computers are examples of first-generation computing devices.

# First generation computers





# Second generation computers

(1956-1963)

- Transistors replaced vacuum tubes in the second generation of computers.
- High-level programming languages were also being developed at this time, such as early versions of COBOL and FORTRAN.
- These were also the first computers that stored their instructions in their memory.

# Second generation computers



# Third generation computers (1964-1971)

- a) The development of the integrated circuit was the hallmark of the third generation of computers.
- b) Transistors were fused and placed on silicon chips, called semiconductors.
- c) Interaction in third generation computers were made through keyboards and monitors and interfaced with an operating system.
- d) Many different applications can run at a time.

# Third generation computers

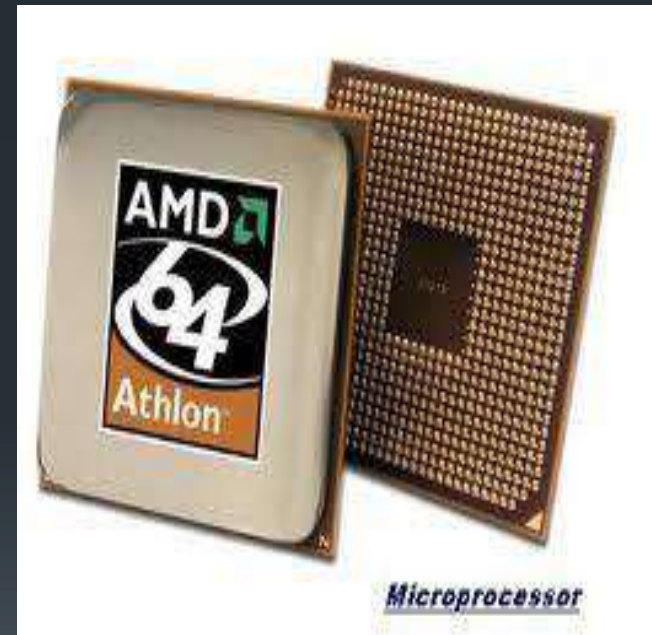


# Fourth generation computers

(1971-present)

- a) The microprocessor brought the fourth generation of computers, as thousands of integrated circuits were built onto a single silicon chip.
- b) The Intel 4004 chip is an example.
- c) From the central processing unit and memory to input/output controls—on a single chip.
- d) Fourth generation computers also helped in the development of GUIs, the mouse and handheld devices.

# Fourth generation computers



# Fifth generation computers (present and beyond)

- a) Fifth generation computing devices, based on artificial Intelligence(AI).
- b) Are still in development, though there are some applications, such as voice recognition, face recognition.
- c) The use of parallel processing and superconductors is helping to make artificial intelligence a reality.
- d) The goal of fifth-generation computing is to develop devices that respond to natural language input and are capable of learning and self-organization.

# Fifth generation computers







THANK YOU STUDENTS ,  
HOPEFULLY YOU  
UNDERSTOOD ABOUT  
GENERATIONS OF  
COMPUTER.  
MEET U NEXT TIME.

THANK YOU  
STUDENTS.

