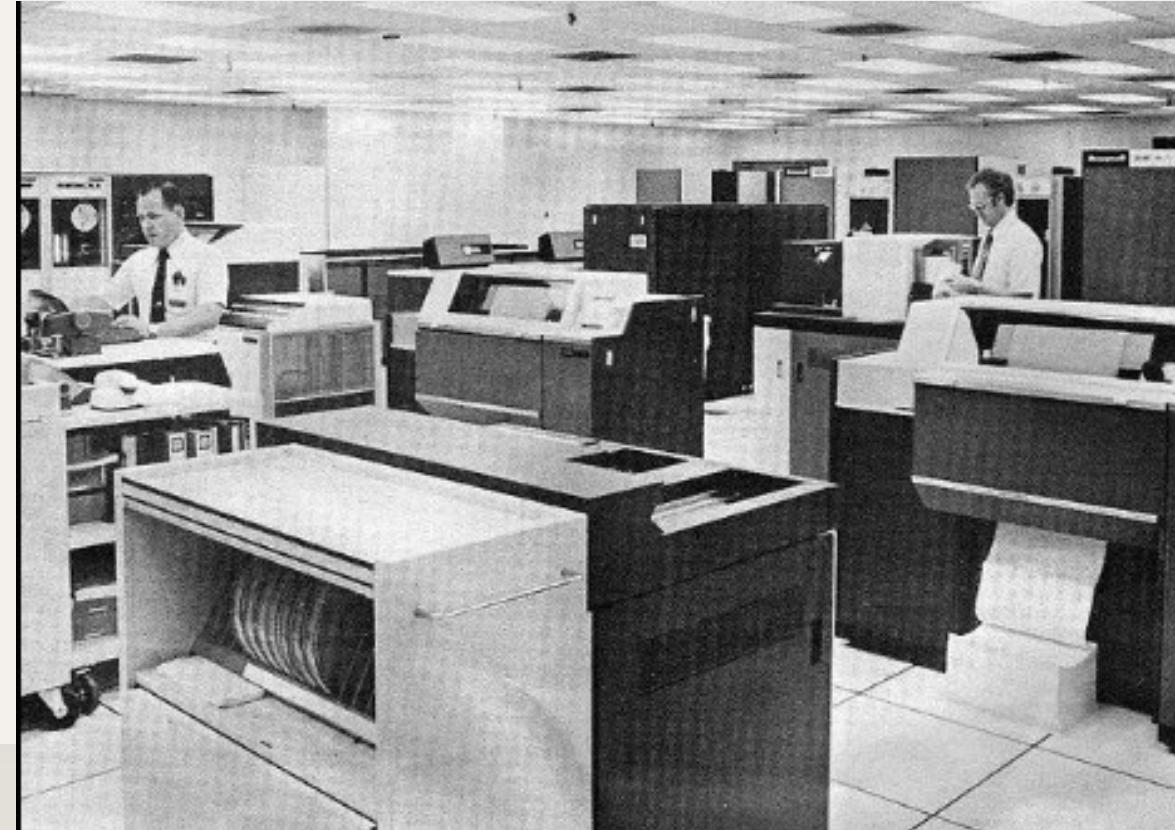
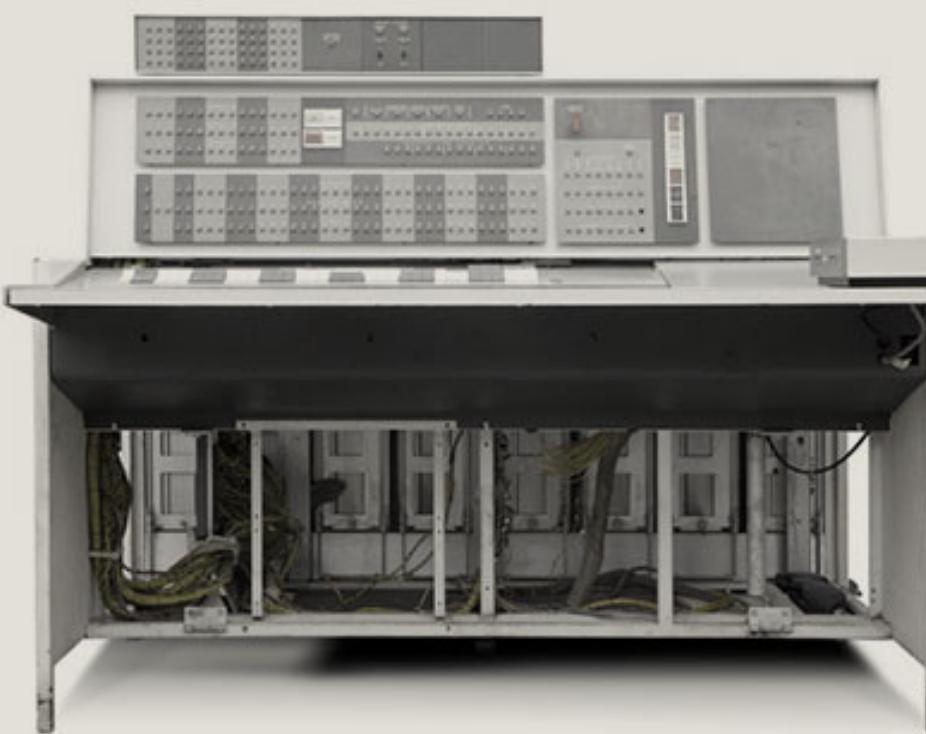
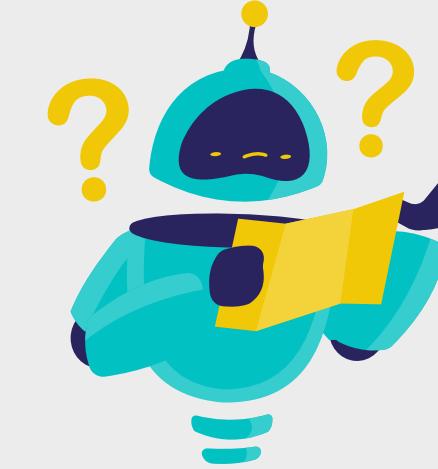


# Genreation of Computers



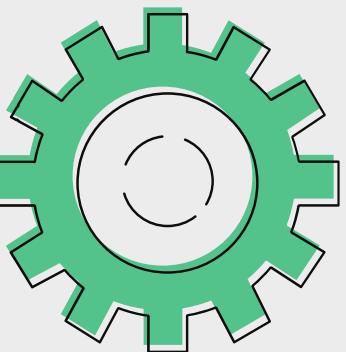
# What is Computer ?



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Computer is an electronic machine and data processing system. Which receives data as an input and perform processing on an data and finally gives the desired output.

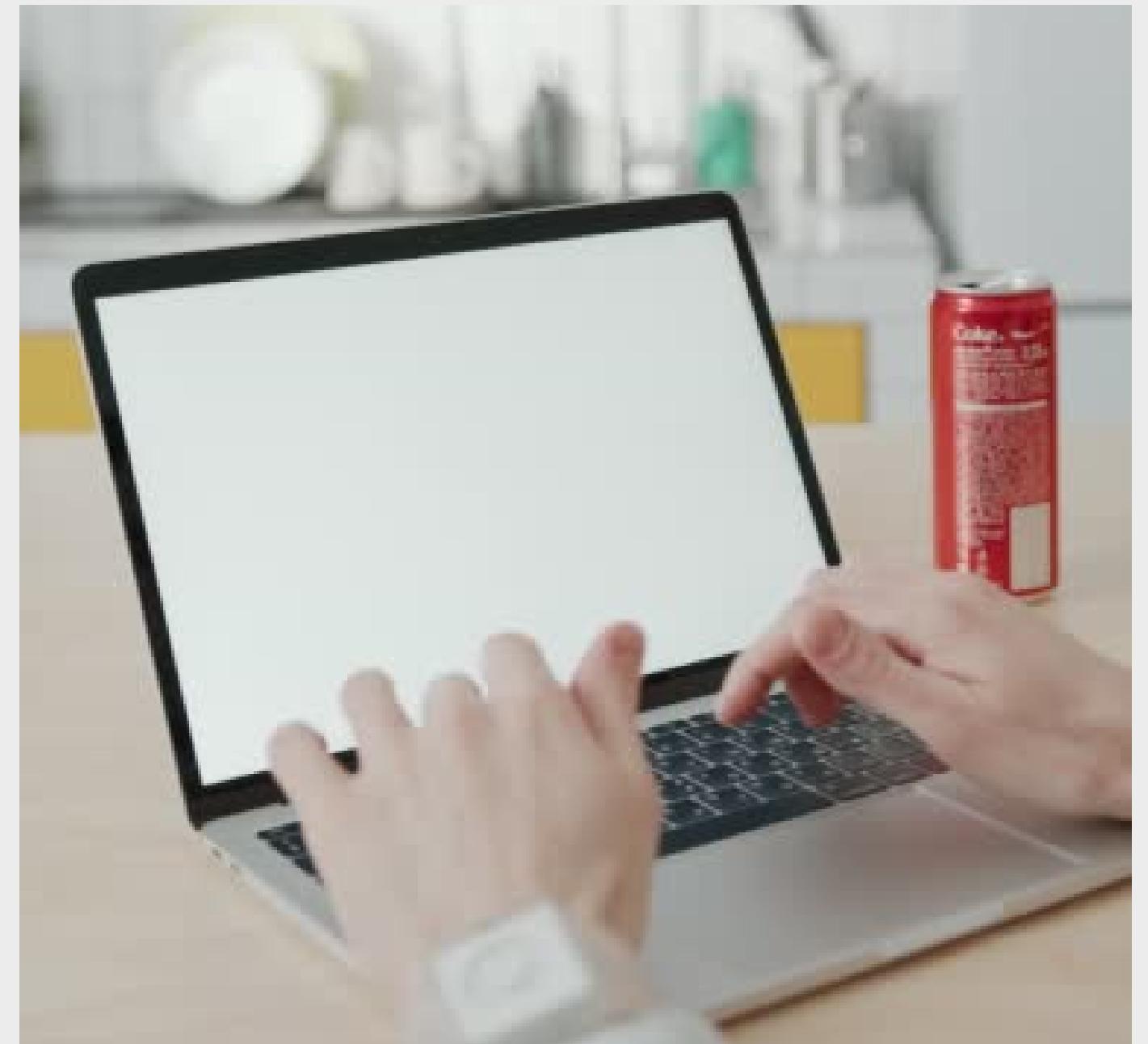
# Functionality of Computer



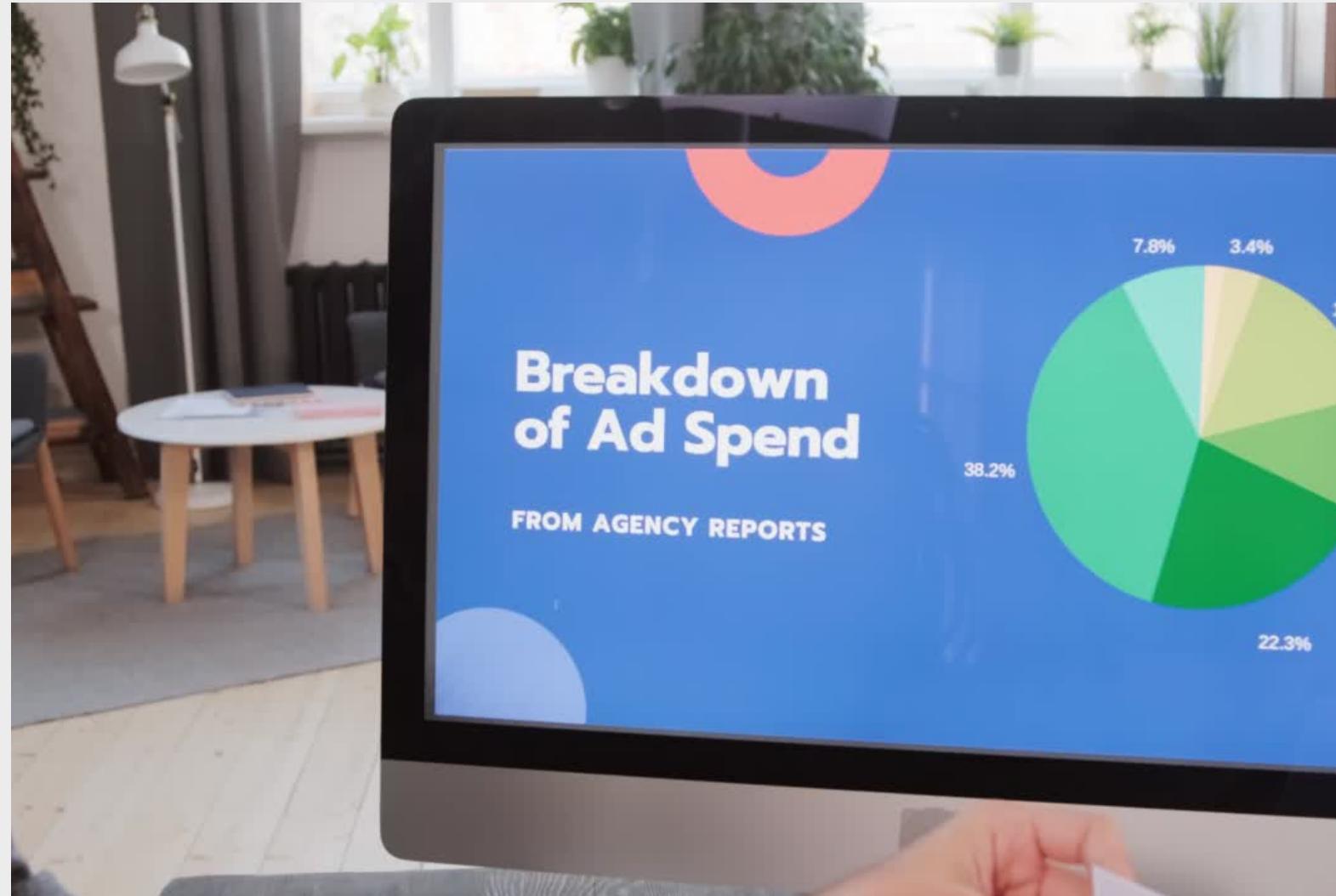
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There are three basic functionalities of a Computer System and they are

1. Input
2. Process
3. Output



# Advantages of Computer



Advantages are as follows

- 1.High Speed**
- 2.Accuracy**
- 3.Reliability**
- 4.Automation**

# Disadvantages of Computers

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Disadvantages of Computers

- 1.Dependency
- 2.Enviroment
- 3.No Feeling



# Application of Computer

1.Banking



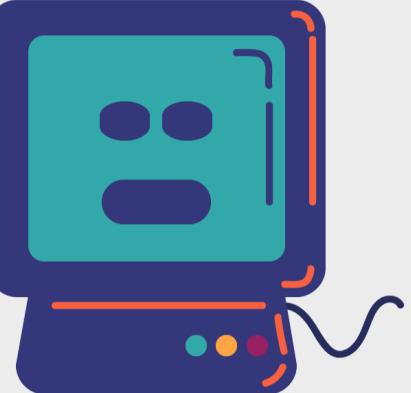
2.Education



3.Militray



# Generation of Computers



07

- 
- 1. First Generation
  - 2. Second Generation
  - 3. Third Generation

- 4. Fourth Generation
- 5. Fifth Generation





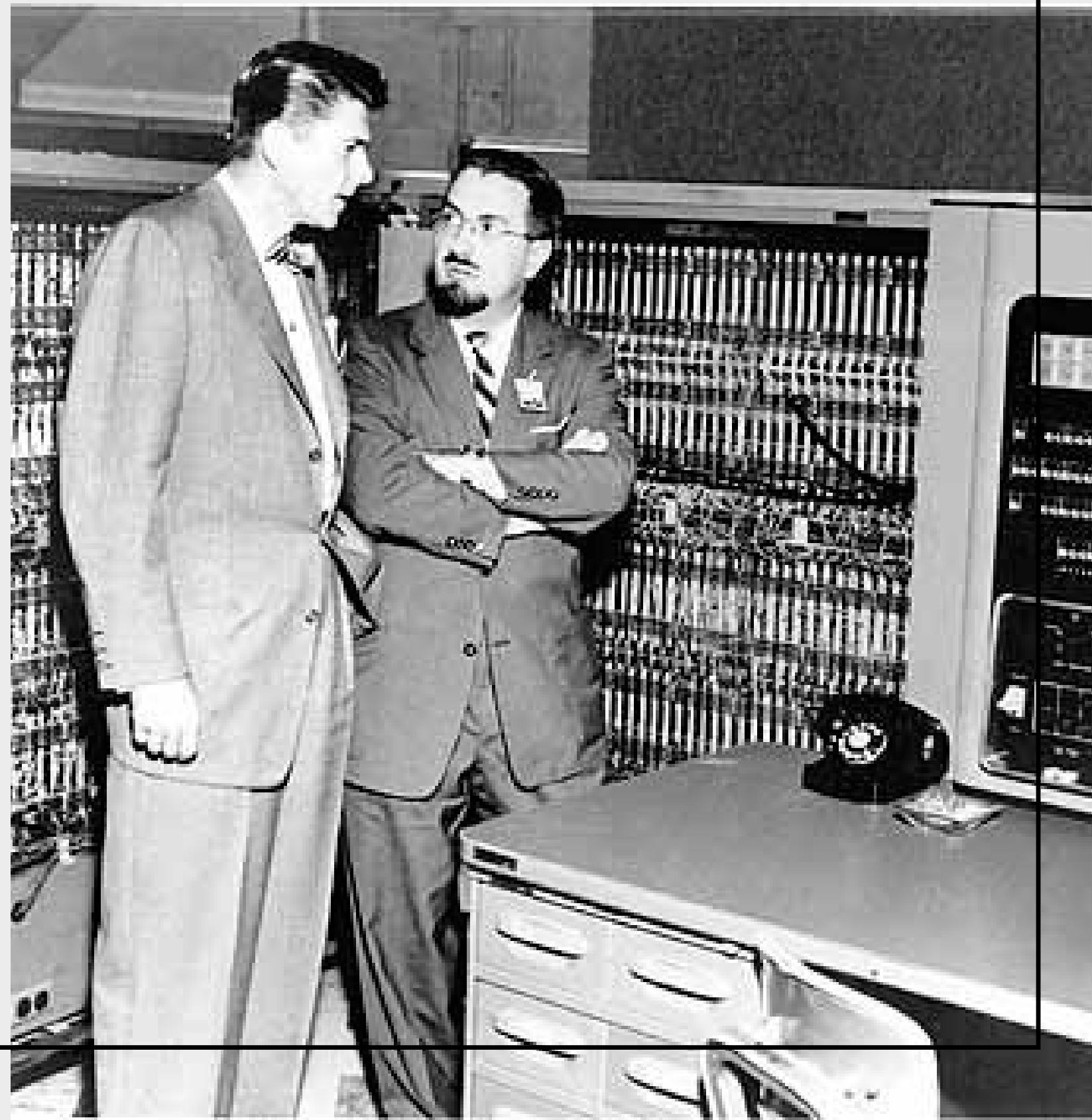
# First Generation



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The period of first generation was from **1946-1959**. The computers of first generation used **vacuum tubes** as the basic components for memory and circuitry for CPU (Central Processing Unit).

---



# The main features of the first generation are:

---

1. Vacuum tube technology
2. Supported machine language only

# Vacuum Tubes ⚡



These tubes, like **electric bulbs**, produced a lot of heat and the installations used to **fuse frequently**

Disadvantages of Vacuum Tubes

1. Need of AC
2. Unreliable
3. Generates lot of heat
4. Consumes lot of electricity

1. ENIAC



2. UNIV  
AC



Computers of  
this generation  
were

3. IBM-701

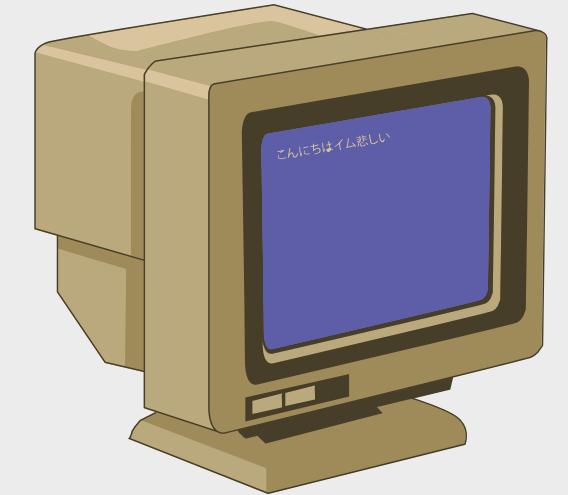


# Second Generation

The period of second generation was from **1959-1965**. In this generation, **transistors** were used that were cheaper, **consumed less power**, **more compact in size**, **more reliable** and **faster** than the first-generation machines made of vacuum tubes.



# The main features of second generation are



**Second Generation  
1959-1965**

- 
- 1. Use of transistors
  - 2. AC Required
  - 3. Still very Costly
  - 4. Smaller size as compared to first generation computers
  - 5. Supported machine and assembly languages

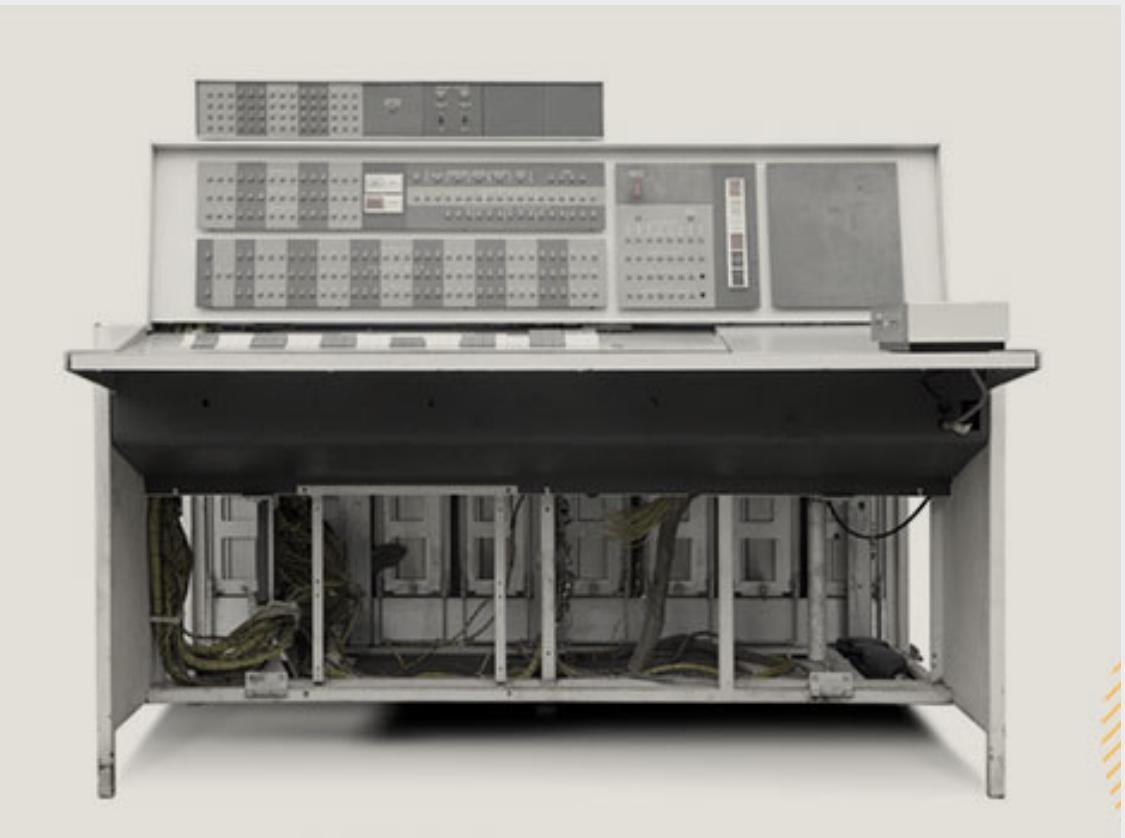
# Some computers of this generation were



i IBM-1620



CDC -3600



IBM 7094

# Third Generation Computers

The period of third generation was from **1965-1971**. The computers of third generation used **Integrated Circuits (ICs)** in place of transistors. A single IC has many **transistors, resistors, and capacitors** along with the associated circuitry.



# The main features of third generation are



1. IC used
2. Smaller size
3. Faster
4. More reliable in comparison to previous two generations

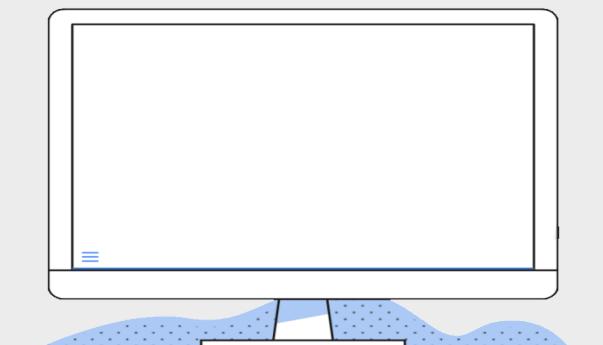


IBM-360 series

Honeywell-6000

IBM-370/168

Some computers of  
this generation were



# Fourth Generation Computers



The period of fourth generation was from **1971-1980**. Computers of fourth generation used **Very Large Scale Integrated (VLSI)** circuits.

# The main features of fourth generation are

1. VLSI technology used
2. Networking between Computers
3. Output is consistent
4. Processing power is fast
5. Use high level language



# Some computers of this generation were



DEC10

CRAY-1  
(Super Computer)



PDP11

# Fifth Generation Computers



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The period of fifth generation is **1980-till date**. In the fifth generation, VLSI technology became **ULSI** (**Ultra Large Scale Integration**) technology.



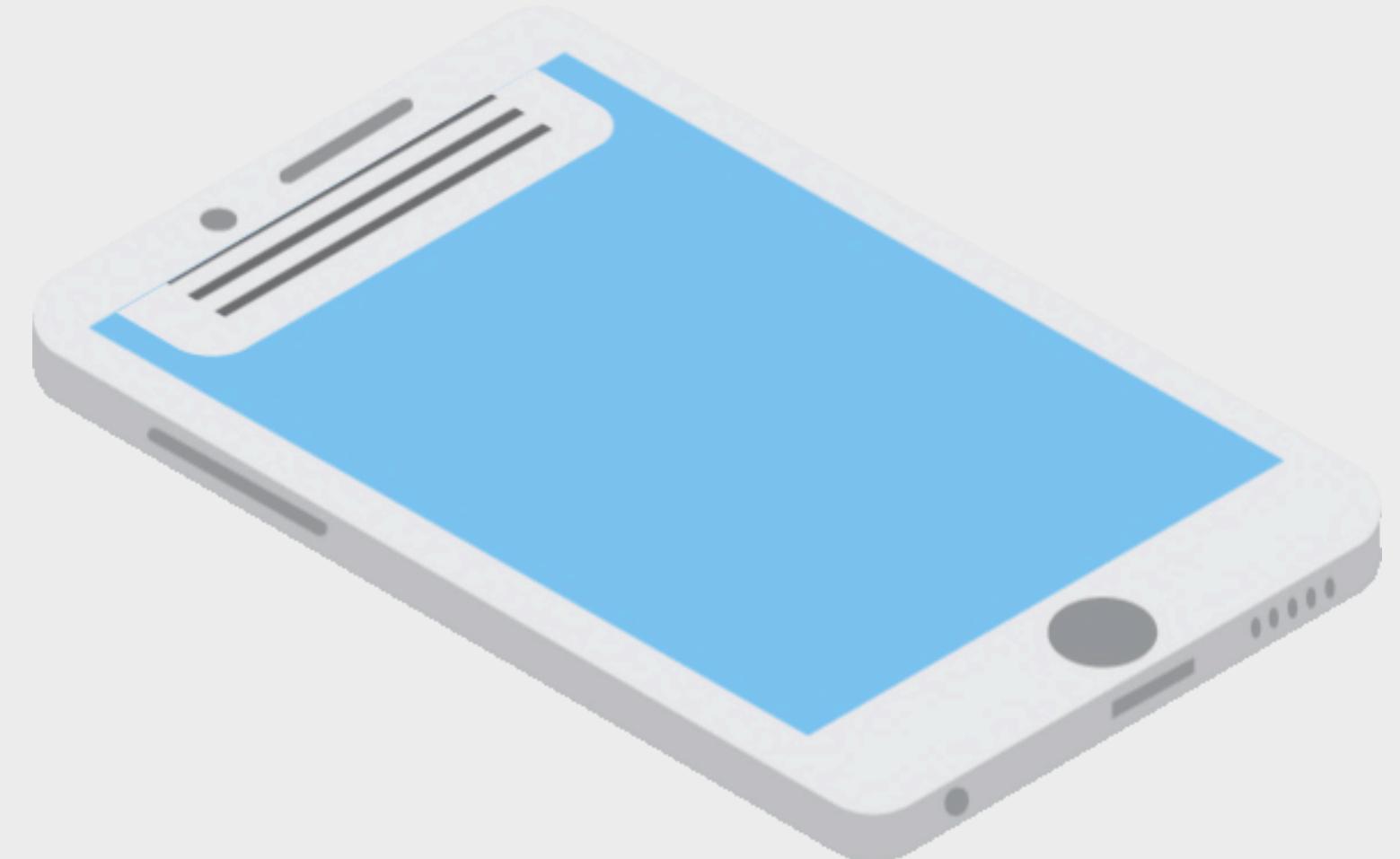
# The main features of fifth generation are



1. ULSI technology
2. Development of true artificial intelligence
3. Development of Natural language processing
4. Advancement in Parallel Processing
5. Advancement in Superconductor technology
6. More user-friendly interfaces with multimedia features
7. Availability of very powerful and compact computers at cheaper rates

# Following are some advantages of fifth-generation computers:

1. Quicker
2. Simpler to Repair
3. Substantially Smaller in Size
4. Easy to Move
5. True artificial intelligence
6. Parallel Processing
7. Superconductor Technology



# Some computer types of this <sup>24</sup> generation are



Laptop



Tablet



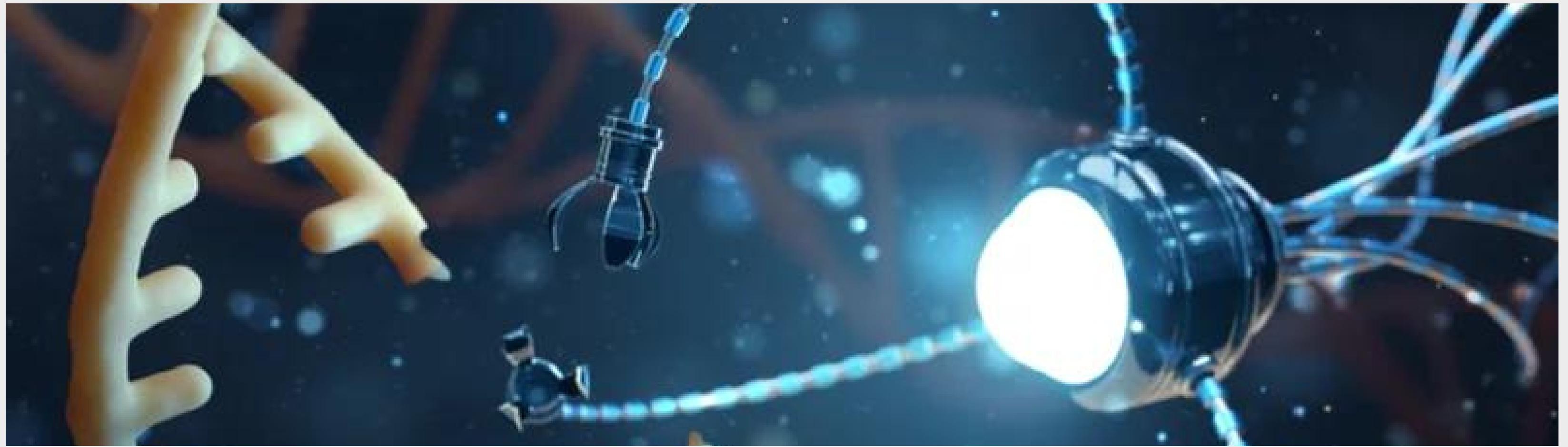
Desktop



Smart Phone

# Future of Computer





# Nano Technology

Nanotechnology refers to the branch of science and engineering devoted to designing, producing, and using structures, devices, and systems by manipulating atoms and molecules at nanoscale, i.e. having one or more dimensions of the order of 100 nanometres (100 millionth of a millimetre) or less.

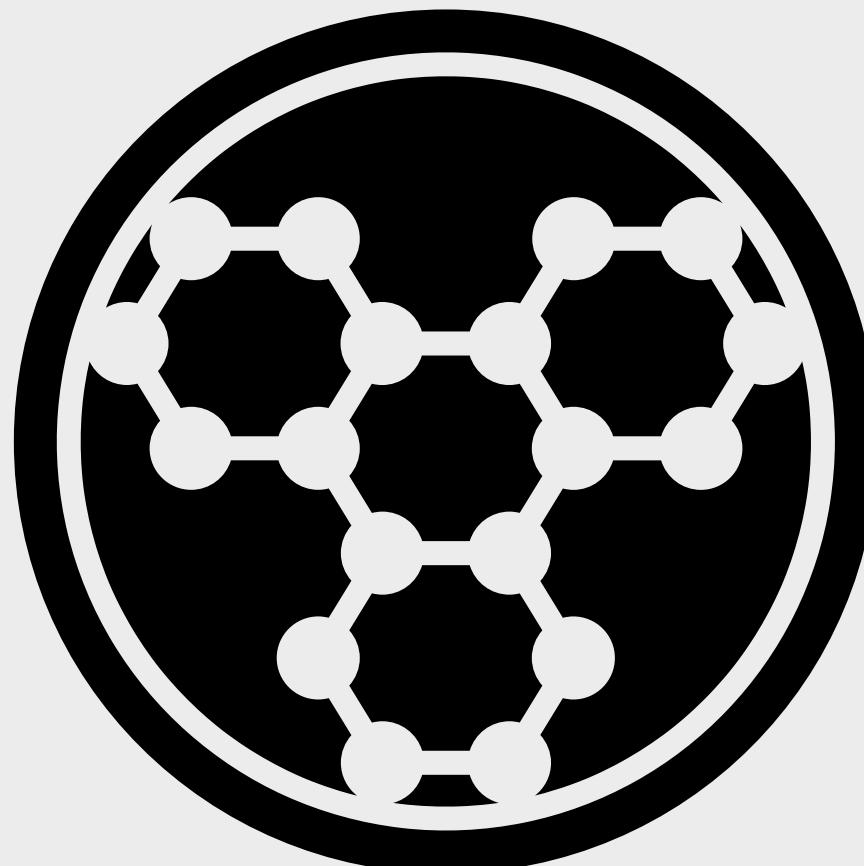
# What does Nano means ?

The prefix 'nano-' is derived from the Greek word nannos, meaning "very short man." At its root, the prefix 'nano-' refers to a scale of size in the metric system.

'Nano' is used in scientific units to denote one-billionth ( $10^{-9}$ ) of the base unit.

# Types of Nanotechnology

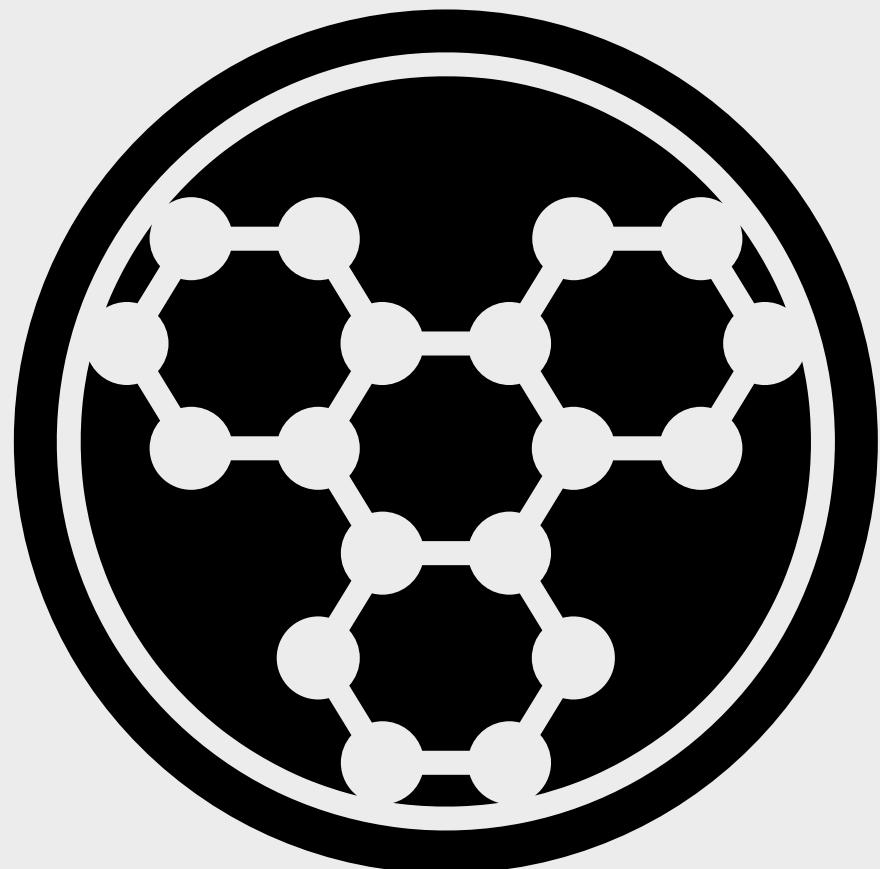
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- 1.Bionanotechnology
- 3.Quantum nanocomputers

# Explanation

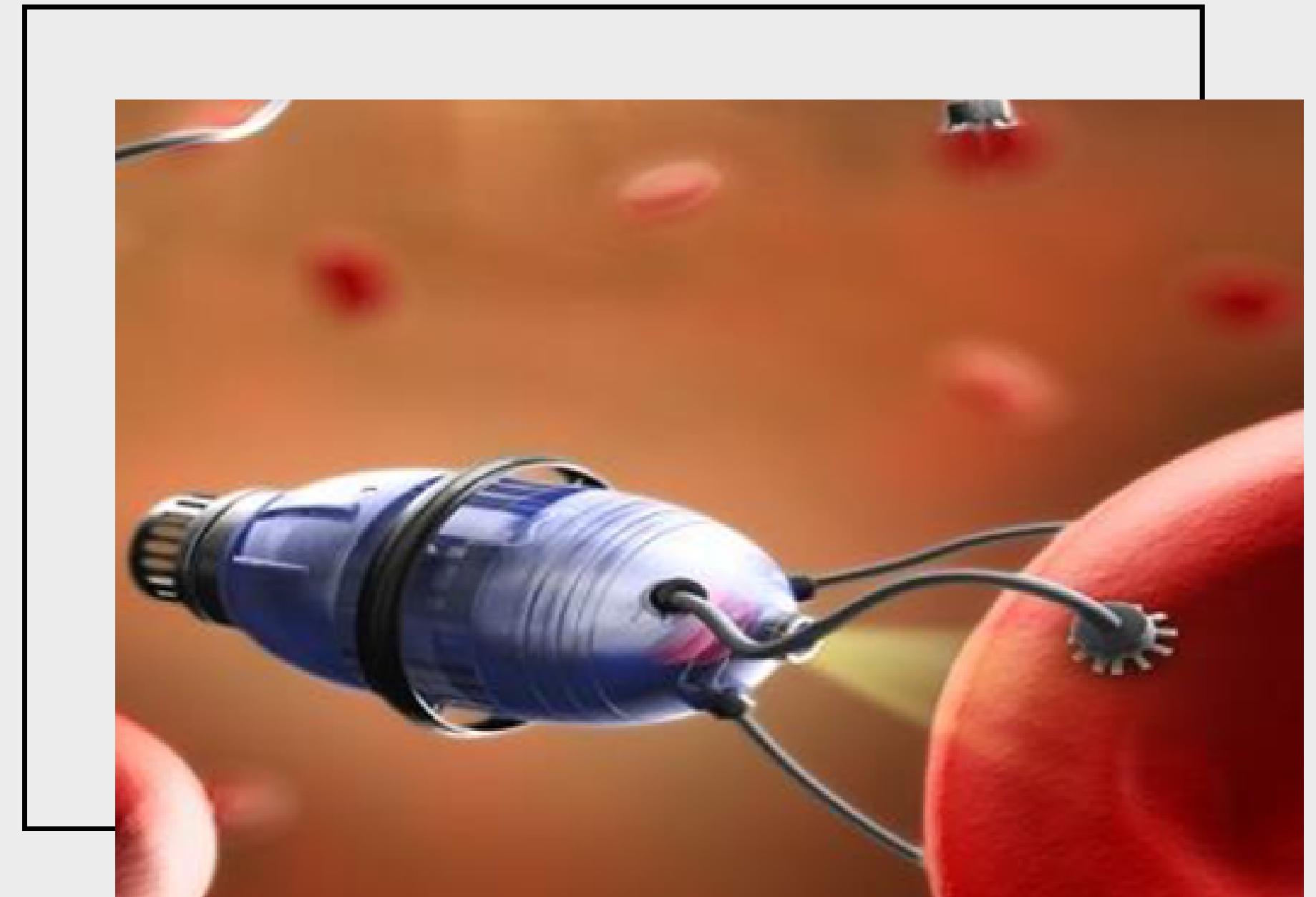
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- 1.Nano
2. Atom
3. Atomic Structure

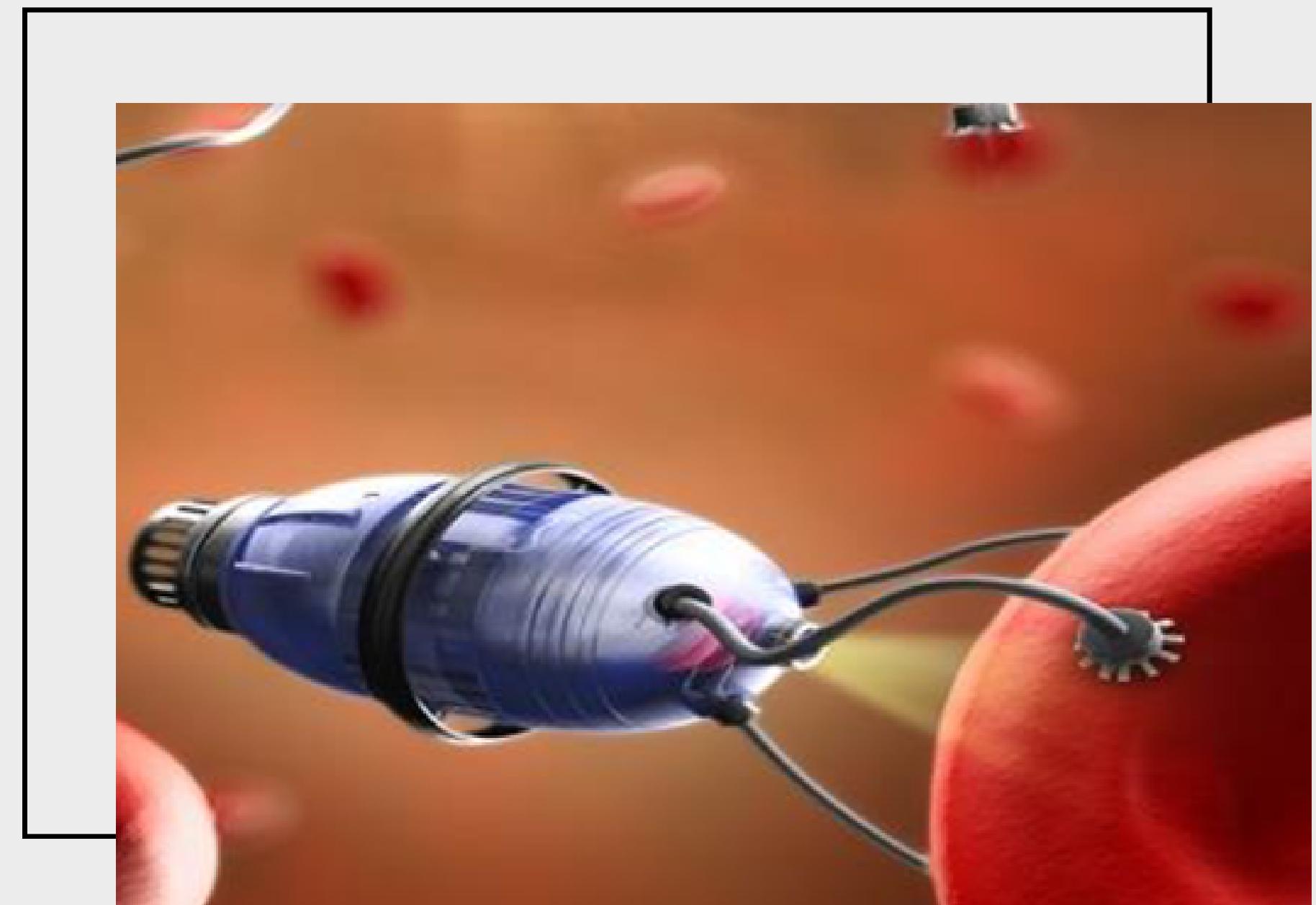
# Bionanotechnology

Bionanotechnology involves the use of biological processes to manipulate mimic these processes at the nanoscale to create structures performing particular task.

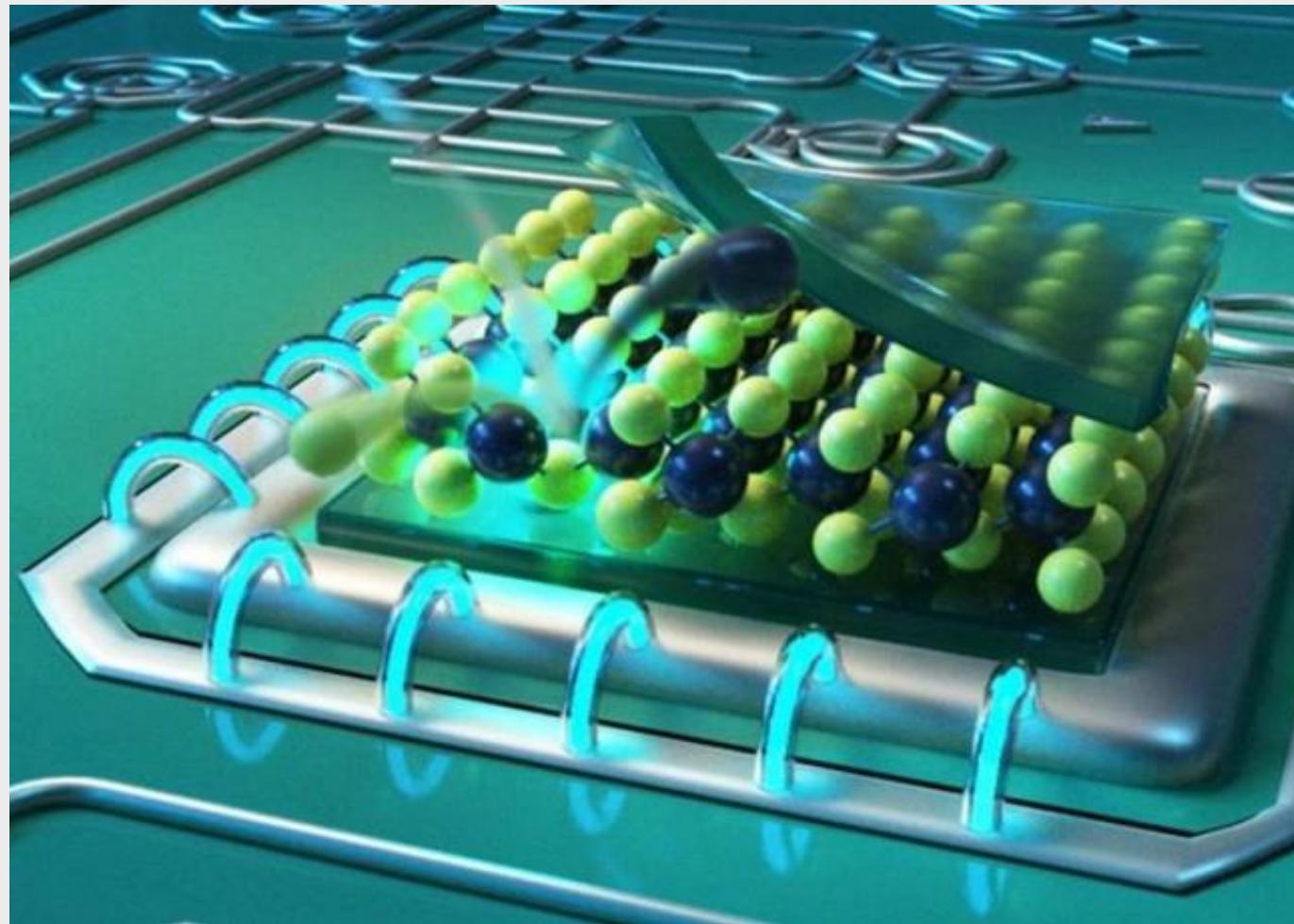


# Explanation

1. Biology
2. building bloks of bio

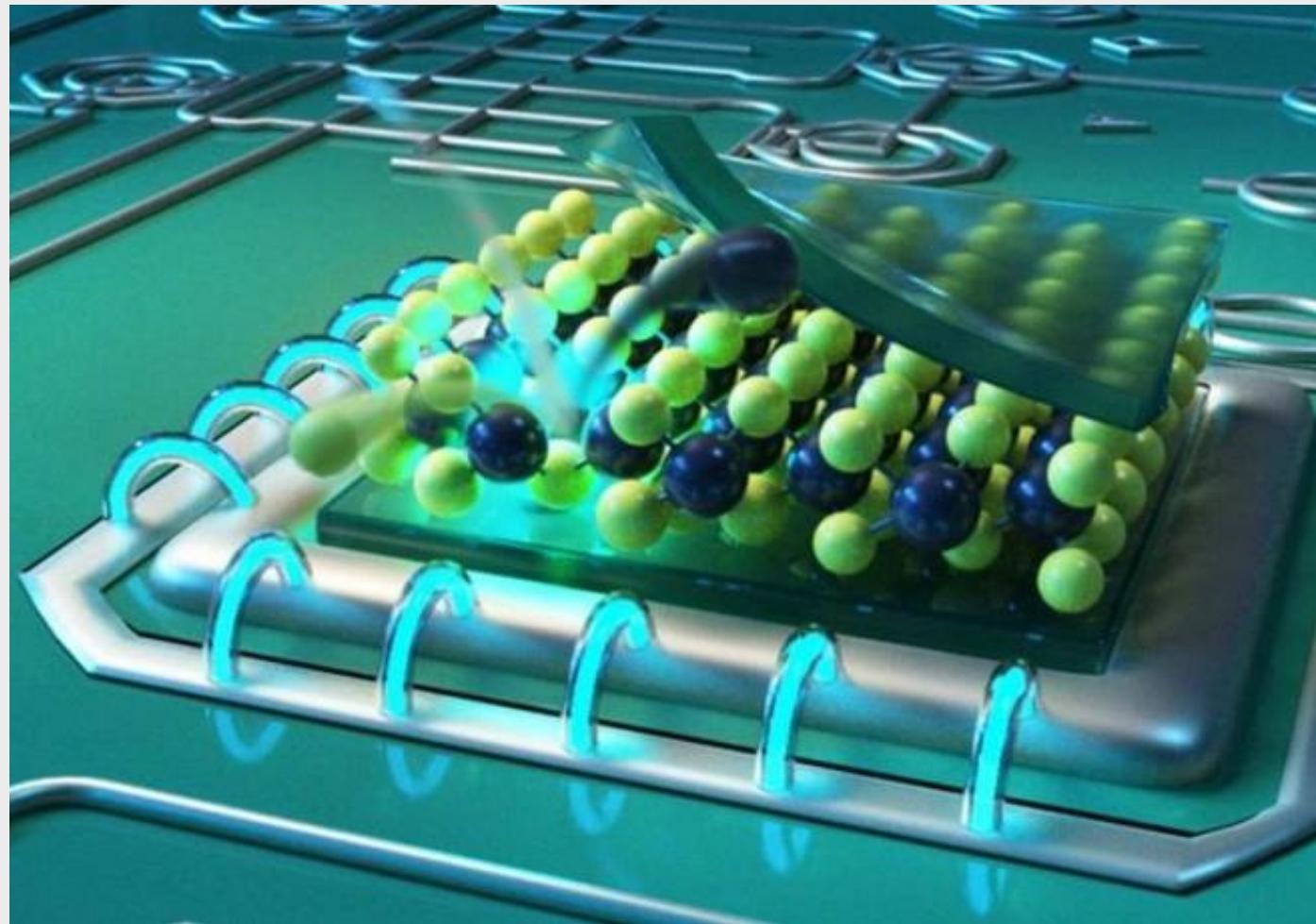


# Quantum Nanocomputers



The field of quantum computing focuses on the development of computer technologies based on the principles of quantum theory. Quantum theory explains the behavior and nature of matter and its energy at the quantum level.

# Explanation



1. Binary
2. bits
3. Qbits
4. Super Position

# Presented by Bit by Bit Group



## Group Members :-

- 1.Vikas joshi
- 2.Harshika pardesi
- 3.Hemant Patwari
- 4.Mohit Basediya
- 5.Rupali Dhote
- 6.Jayanti Rajput

# THANK YOU!