

Hello!

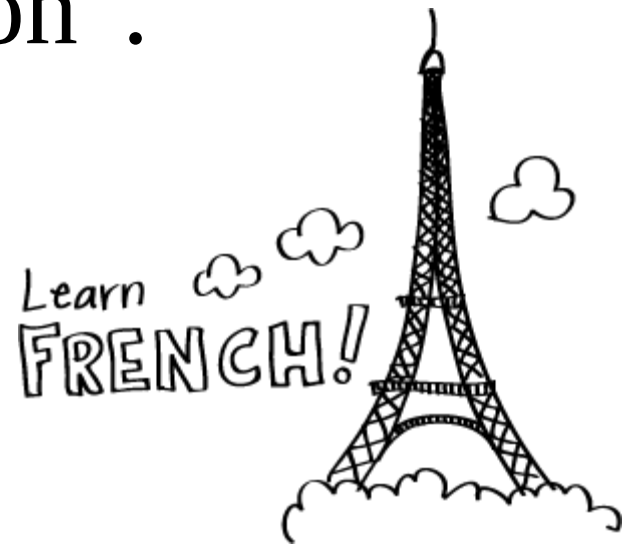


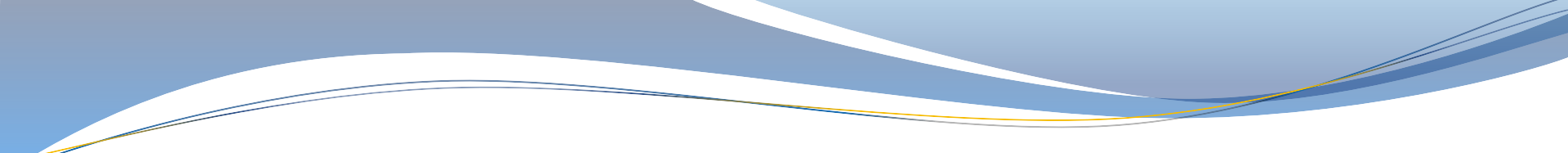
What's your name?
Where are you from?
How are you today?
What is your favorite subject?
What is your e-mail?

What is computer science?

What is informatics?

The term "informatics" (French informatique) comes from the French words information (information) and automatique (automation) and literally means "information automation".





Informatics is a discipline based on the use of computer technology that studies the structure and general properties of information, as well as the patterns and methods of its creation, storage, search, transformation, transmission and application in various spheres of human activity.



CREATION

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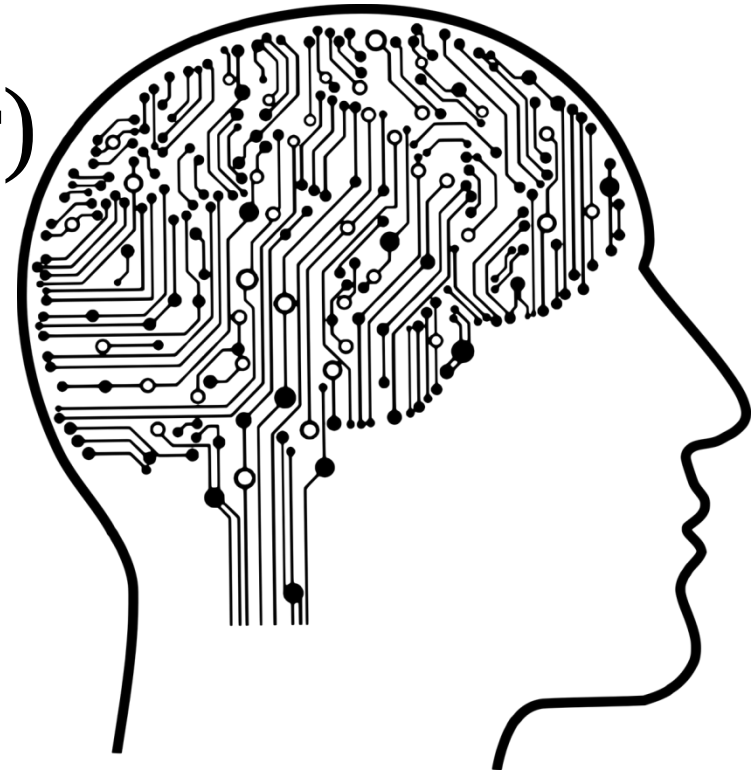
Informatics as a science originated in the middle of the XX century thanks to the invention of computers.



Electronic computer
(electronic brain)

=

computer
(calculator)



Applications of computers:

- office work,
- publishing activity
- computer animation,
- advertising activity
- computer music,
- video
- automation of calculations (accounting, scientific, statistical)
- information search systems (archival and library activities, sale of goods, tickets)
- CAD (computer-aided design systems)
- ACS (automated control systems)
- communication (computer networks)
- programming
- training and game programs

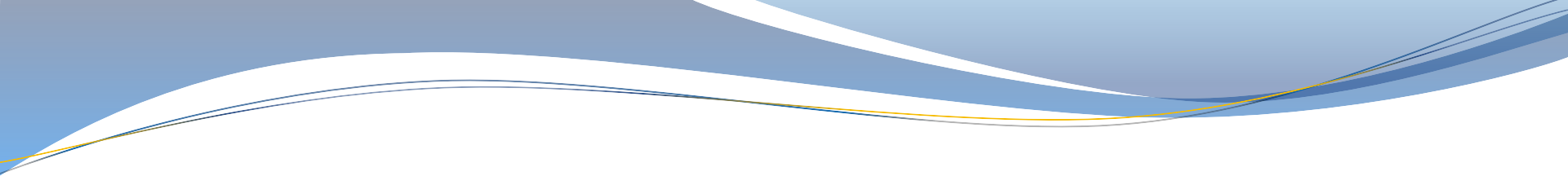


The main directions of informatics:

- development of computing systems;
- development of software;
- information theory;
- artificial intelligence methods;
- system analysis;
- methods of computer graphics, animation,
- multimedia tools;
- telecommunication facilities;
- various applications



Information theory studies the processes associated with the transmission, reception, transformation and storage of information



Artificial intelligence techniques
They allow you to create programs for
solving various problems.
For example, tasks requiring intellectual
effort
It takes effort to carry out such tasks.
(inference, learning, speech understanding,
visual perception, games, etc.)

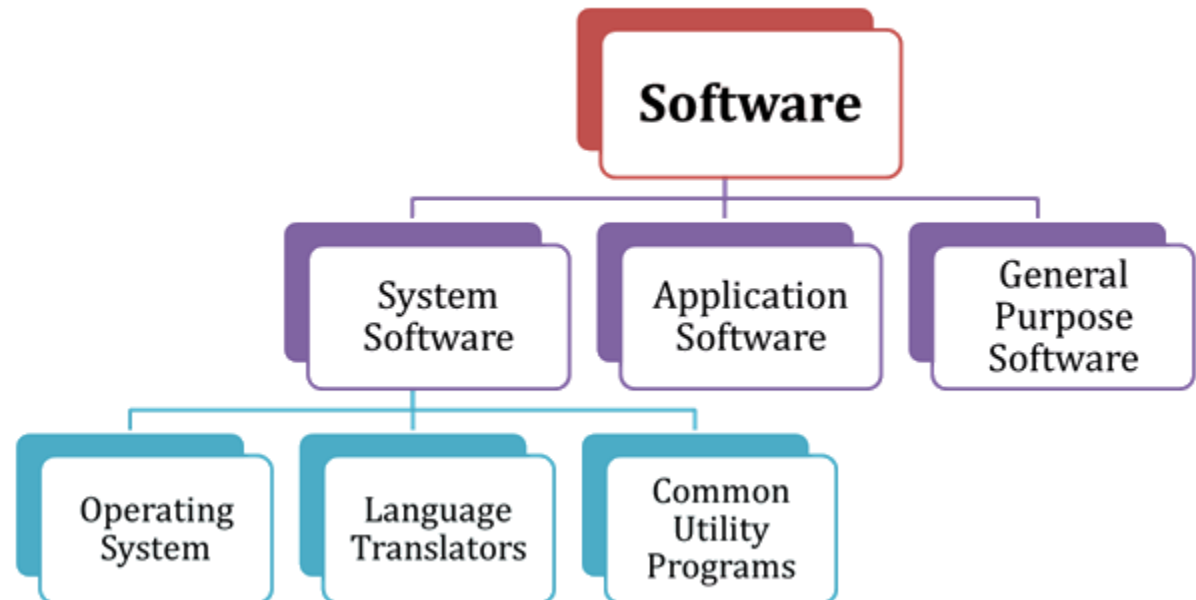
System analysis consists in analyzing the purpose of the designed system and in establishing the requirements that it must meet.

Telecommunication means, including global computer networks, uniting all of humanity into a single information community;

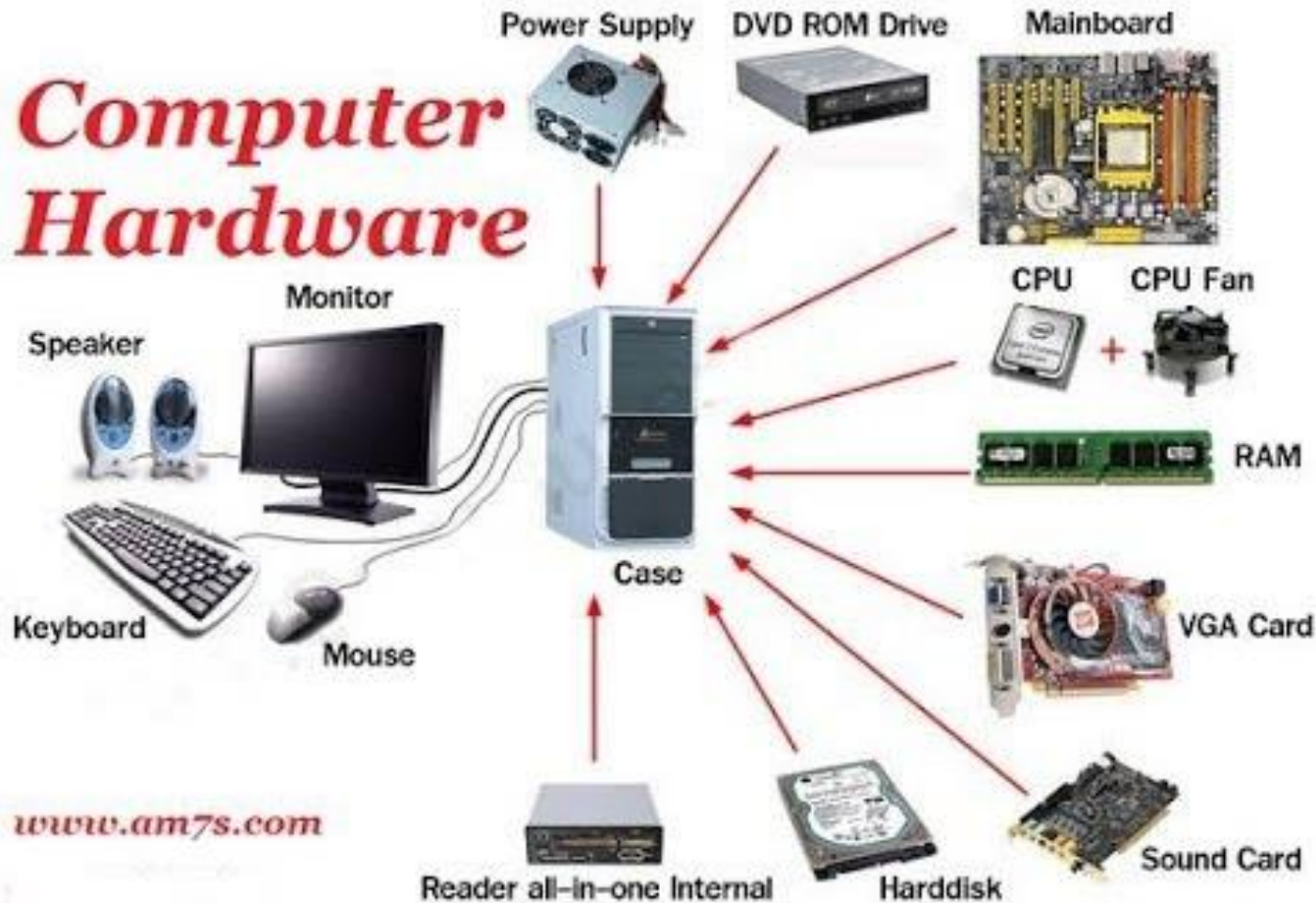
Applications cover manufacturing, science, education, medicine, trade, agriculture and all other types of economic and social activities.

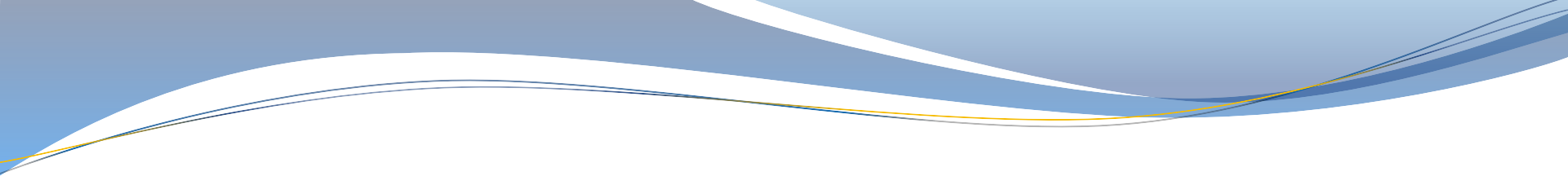
Informatics consists of two parts:

- Technical means
- Software



Technical means - computer hardware – Hardware - "hard products"





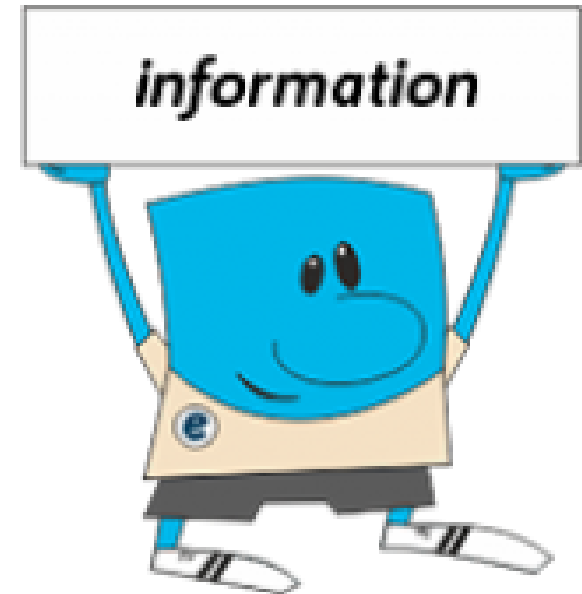
Software - Software (literally - "soft products"), which emphasizes the equivalence of software and the machine itself

Software emphasizes the ability of software to modify, adapt, evolve.

Information (lat. informatio) - information, clarification, presentation definition of information:

- information in everyday life – information about the surrounding world and the processes taking place in it
- in technology, information – messages transmitted in the form of signs and signals
- in science information – information that removes uncertainty
- in cybernetics, information is a part of knowledge that is used for active action and control.
- in the semantic theory – information is (the meaning of a message) information that has novelty
- in document flow – information is everything that is recorded in symbolic form

Information -
it is a reflection of the outside world with
signs and signals.



CONCLUSION

Informatics is the science of information.

Information is processed by the computer.

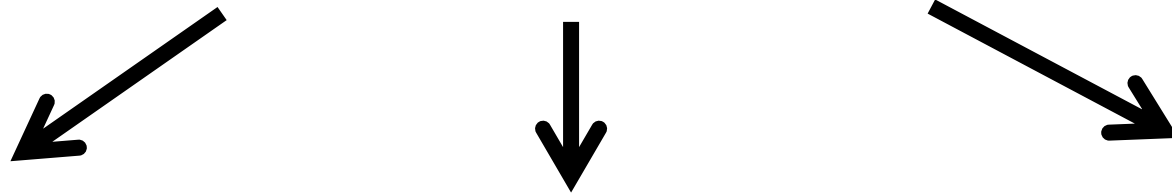
The computer works on machine language
("0" and "1" - binary code)

The computer processes the commands.

Programs are written in computer languages



Programming languages



Low-level
Languages

for example,
Assembler

Intermediate-
level

language

for example,
Objective-C

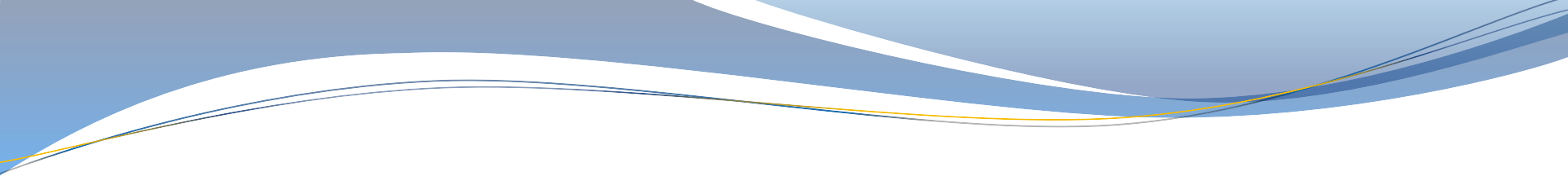
High-level
Languages

for example,
Basic,
Visual Basic (VB),
C,
C++,
C#,
Java...



Getting started





Good to see you next time!