## Computer software

## Operating systems

## The notion of software

The program - is a specific set of ordered operations for a computer to perform.

The collection of all programs designed to run on a computer, called the software computer.

A computer is considered as a system consisting of interrelated parts: hardware (technical devices) and software.

## Computer programs



## Systems of programming

System software includes the operating system and service programs.
Operating System - a set of programs that provide operation of all computer devices and gives the user access to computer resources.
The most common operating system for personal computers:


Windows



Apple


## System Software

The computer is part of the "man - computer" system.
Means to ensure the relation ship between the objects of this system is called interface.


## Systems of programming

## Programming - is the process of creating programs, the development of all types of software

To record the programs used specific languages programming languages (formal languages)

Complex software designed to develop computer programs
a programming language, called programming system

## General purpose applications




## Electronic

 tables

Multimedia players

## Presentation Software



Control systems database


## Applications for special purposes

## Publishing

 system

MATLAB Мнженерны рАСЧеты в Mathoad 15

## Accounting programs <br>  <br> Geoinformation system



Computer-aided system CAD design

# Programs of computer modeling 



Textbooks, exercise machines, dictionaries

## Operating system (OS)

is system software that manages computer hardware and software resources and provides common services for computer programs.

## Basic functions of the operating system

## Device configuration

Controls peripheral devices connected to the computer

## File management

Transfers files between main memory and secondary storage, manages file folders, allocates the secondary storage space, and provides file protection and recovery

## Memory management

Allocates the use of random access memory (RAM) to requesting processes

## Interface platform

Allows the computer to run other applications

## Other function of Operating

## System

- best use of the computer resources
- provide a background for user's programs to execute
- display and deal with errors when it happens
- control the selection and operation of the peripherals
- act as a communication link between users
- system protection

