# Practice Work 4

# Software computer. Choice of configuration computer

# Hardware configuration of personal computers.

Computer configuration - the design features of a computer, including the architecture, composition and characteristics of the main components and auxiliary (peripheral) means, as well as the organization of connections between them.

A configuration is understood as a certain set of components, based on their purpose, number and basic characteristics.

Configuration means the choice of hardware and software, firmware and accompanying documentation.

Configuration affects the operation and performance of your computer.

The nature of the configuration of personal computers, both in their design and selection, is determined by the composition and complexity of the tasks for which they are designed, including the requirements imposed by the corresponding software tools.

# The main directions for changing the configuration:

- 1.replacing obsolete components and expanding capabilities is called an upgrade (upgrade).
- 2.An increase in system performance can also be achieved by artificially increasing the clock frequency of microprocessors (central and / or others) "overclocking" (overclocking).
- 3. Changing the look of your computer is called modding.

# Minimal, basic and optimal configuration

The term "minimum configuration" of a personal computer is usually associated with a specific type of central processing unit, standard or minimum sizes of internal and external memory, keyboard and monitor.

# **Basic PC configuration**

Basic PC configuration - the minimum set of hardware, sufficient to start working with the computer.

- System unit;
- Monitor;
- Keyboard;
- Mouse.



All functions performed by a computer can be roughly divided into several categories:

- work in office applications,
- visiting sites on the Internet,
- playback of music and films,
- •3D animation, games, etc.

Most categories have their own optimal level of PC performance, and exceeding it will not do any good. On the contrary, a computer that is too fast will consume additional electricity, heat up more and make a louder noise.

Therefore, the advice is simple: in order not to overpay for excess power, purchase a system with the optimal operating speed for solving your range of tasks.

# Three basic computer configurations

Office computer. If your PC tasks will include preparing documents, browsing the Internet, listening to music, etc., you need an inexpensive office computer.

Multimedia computer. Do you want to watch movies in high quality, play modern games, edit videos? Then the ideal option for you is a multimedia computer with an optimal price / quality ratio.

Game station. Love 3D shooters and don't miss a single new game? In this case, only a powerful and expensive gaming station will satisfy your needs.

# Multimedia computer

A multimedia computer is used for video playback, including high-definition video, listening to music and watching TV, and when a discrete video card is installed, it allows you to run modern games in medium to high quality graphics. The presence of additional devices and expansion cards allows it to replace almost all home audio and video equipment, from a music center to a Blu-ray player. The main criteria are convenience, beauty and functionality. Better to assemble in a beautiful and high quality case designed specifically for home theater PC (HTPC, Home Theater Personal Computer). High-definition movie playback is a resource-intensive task that seriously load the central processor. In a multimedia PC, modern models of integrated graphics cores will come to his rescue, which have a special unit for hardware acceleration of decoding of the most common video formats. These include NVIDIA GeForce 9300 and 9400 (Intel Socket 775 platform), AMD Radeon HD 3200 (AMD Socket AM2 + platform) and Intel GMA X4500 HD. Also, the board should be equipped with DVI and HDMI video outputs and support HDCP.