PROGRAMMING LANGUAGE C++

Student Afanasieva J., group INs-22,
Mulina N. I., Ph. D., EL advisor

C++ was written by Bjarne Stroustrup at Bell Labs during 1983-1985. C++ is an extension of C. Prior to 1983, Bjarne Stroustrup added functions to C and formed what he called "C with Classes". He had combined the Simula's use of classes and object-oriented functions with the power and efficiency of C. The term C++ was first used in 1983.

The title C++ was invented by Rick Massitti. The name indicates the evolutionary nature of the transition to it from C. "+ +" (read: double plus) means an operation of increment in C.

C++ has been initially designed to make writing good programs easier for the individual programmer.

C++ has been still developing in all directions in order to cope with the difficulties faced by users, as well as in the author's discussions with his friends and colleagues.

In C++, the principles of object-oriented programming are fully supported, including the three pillars on which it stands: encapsulation, inheritance, and polymorphism.

Encapsulation in C++ is supported through the creation of non-standard (custom) data types, called classes.

C++ supports inheritance. This means that you can declare a new data type (class) that is an extension of the existing one.

Polymorphism is the most important and widely used concept in object-oriented programming. Some of the widely used technologies and libraries like COM, MFC etc. have polymorphism as their foundation.

C++ is used to develop operating systems, such as: Kernel UNIX, Windows, UNIX like systems and WinAPI (Windows Application Programming Interface). It is used to create new programming languages. C++ is applied in training.

C++ is now considered the dominant language used for developing commercial products, 90% of games are written in C++ using DirectX.