Representation of selection and cycle operators of programming languages in the graph-schemes of algorithms

© Yu.M. Rudenko

Bauman Moscow State Technical University, Moscow, 105005, Russia

The given paper considers a possibility of using graph schemas for the image task parallel algorithms to solve a series of calculations, and conditional operators of computing direction selection. The offered methods of imaging these operators allow to build parallel branches of algorithms easily. This is one of the advantages of these techniques. It should be noted that, due to certain reasons, there are differences in the syntaxes of the operators of many programming languages. Focusing on versatility of use of graph-diagram, it should be noted that these differences are characteristic for the most commonly used programming languages.

Keywords: computer system, elementary, selection statement, a loop, a graph-scheme of algorithm, loop setting, programming languages, parallel algorithms, branch algorithms, edge of the graph.

Rudenko Yu.M. (b. 1941) graduated from Kharkov Polytechnic Institute. Ph.D., Assoc. Professor of the Computer Systems and Networks Department at Bauman Moscow State Technical University. Author of approximately 100 publications in the field of computer technologies. e-mail: kirur@bk.ru