THE SCOPE COMPARISON OF IMPERATIVE AND LOGICAL PROGRAMMING

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In classifications of contemporary paradigms of computer programming imperative and logical programming are suggested as alternative approaches. In this work a set of imperative programs is proved to be a subset of logical programs in special mathematical formalization in case if a logical approach allow a possibility of nonmonotonic derivation to be. A special apparatus being an authors invention - logical relations on lattices - is used for this purpose. The result of this work allows using logical methods for analyses and optimization of imperative algorithms.