

# Διαδικαστικός Προγραμματισμός (Η γλώσσα C)

Πάρις Μαστοροκόστας



## METADATA

**Title:** Procedural programming

**Other Titles:** C (Computer Program Language)

**Language:** Greek

**ISBN:** 978-960-603-057-4

**Subject:** MATHEMATICS AND COMPUTER SCIENCE

**Keywords:** Procedural programming / Modularity / Interfaces / Algorithms

**Bibliographic Reference:** Mastorokostas, P. (2015). Procedural programming [Undergraduate textbook]. Kallipos, Open Academic Editions. <http://dx.doi.org/10.57713/kallipos-853>

### Abstract

The proposed textbook aims to introduce first-year students to the concepts of procedural programming, structured programming, and modular programming. The C language will be used as the vehicle for instruction, combining the advantages of high-level programming languages with the flexibility of low-level programming due to its inherent characteristics and capabilities. Initially, the basic concepts of programming will be covered, including the basic program structure, variables, input-output, statements, operators, looping constructs, branching constructs, arrays, and strings. Subsequently,

more complex aspects of the subject will be described, such as user-defined types, functions, and files. Special emphasis will be placed on data management (pointers, call by reference, dynamic memory allocation). Particular emphasis will be placed on modular program development and the development of transparent code. The last chapter of the textbook will be dedicated to an introduction to basic linear data structures (queue, stack, linked list). The main focus of the chapter development will be on familiarizing students with the concepts through examples and case studies.

