

Fundamentals of Programming Visual C++

Chapter 1: Introduction to Computers, Programming, and Visual C++

- The Origins of Visual C++
- ANSI Visual C++
- Very Simple Input, Output and Assignment
- Simple Flow of Control

Chapter 2: Primitive Data Types and Operations

- Identifiers
- Data Types
 - Integers
 - Real numbers
 - Type Casting
 - Characters
 - Strings
 - User Defined Data Types

Chapter 3: Selection Statements

- Boolean Values, Expressions and Functions
- The Identifiers "true" and "false" in Visual C++
- If Statement
- Switch Statement

Chapter 4: Loops

- For Loop
- While Loop
- Do ... While Loops

Chapter 5: Functions

- The Need for Sub-programs
- User-defined Functions
- Value and Reference Parameters

Chapter 6: Arrays

- Declaring an array
- Assignment Statements and Expressions with Array Elements
- Arrays as Parameters in Functions
- Sorting Arrays
- Two-dimensional Arrays

Chapter 7: Pointers and C-Strings

- Introducing Pointers
- Declaring Pointers
- Assignments with Pointers Using the Operators "*" and "&"
- The "new" and "delete" operators, and the constant "NULL"
- Array Variables and Pointer Arithmetic
- Dynamic Arrays
- Automatic and Dynamic Variables
- Linked Lists
- The "." and "->" Operators
- Creating a Linked List
- Printing a Linked List
- Strings
- The Sentinel String Character '\0'
- String Variable Declarations and Assignments
- Some Predefined String Functions
- String Input using "getline()"