

# C O N T E N T S

<b>Preface</b>	ix
<b>1 C Refresher</b>	1
Data Representation—Functions—Operators and Expressions—Control Flow Constructs—Arrays and Pointers— Structures and Unions—Storage Classes—Preprocessor Direc- tives and Macros—Casts—Summary—Exercises	
<b>2 The Run Time Environment</b>	47
Program Areas—The Text Area—The Stack—The Data Area— The Heap—Putting It All Together—Summary—Exercises	
<b>3 An Array of Choices</b>	112
Pointer and Array Fundamentals—Pointer Expressions and Arrays—Multidimensional Arrays Revisited—Performance Pointers—Multidimensional Arrays at Run Time—Summary— Exercises	
<b>4 A Closer Look at C</b>	209
Sequence Guarantee Points—Right-Left Rule—Lvalues in Expressions—Fast Array Transfers—Passing Entire Arrays to Functions—Functions with Varying Arguments—Summary— Exercises	
<b>5 C Debugging Techniques</b>	262
C Preprocessor—ASCII and Hexadecimal Debug Display— Command Line Flags—Signals with Debug Output— Assertions—Selective Debug Print Statements—Customized Memory Allocators—Summary—Exercises	

<b>6 A Memory Object Allocator</b>	321
Project ATL—The Object Allocator—Implementing Dynamic Strings—Putting It All Together—Summary—Exercises	
<b>A The Standard C Compiler Under UNIX</b>	363
Compiler Options—Link Editor Options—Preprocessor Options—Compiler Debugging Options	
<b>B C Under Microport System V/AT</b>	375
Memory Models—Other Features	
<b>C C Under SCO XENIX System V</b>	383
Memory Models—Function Calling Conventions	
<b>D Microsoft C 5.0 Compiler</b>	397
Memory Models—ANSI C Features—Other Features	
<b>E Turbo C</b>	419
Memory Models—ANSI C Features—Low Level Support—Other Features	
<b>Index</b>	437