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Nota di contenuto	Contents in Detail; Acknowledgements; Chapter 1: Hello, World of Assembly Language; 1.1: The Anatomy of an HLA Program; 1.2: Running Your First HLA Program; 1.3: Some Basic HLA Data Declarations; 1.4: Boolean Values; 1.5: Character Values; 1.6: An Introduction to the Intel 80x86 CPU Family; 1.7: The Memory Subsystem; 1.8: Some Basic Machine Instructions; 1.9: Some Basic HLA Control Structures; 1.10: Introduction to the HLA Standard Library; 1.11: Additional Details About try..endtry; 1.12: High-Level Assembly Language vs. Low-Level Assembly Language; 1.13: For More Information Chapter 2: Data Representation2.1: Numbering Systems; 2.2: The Hexadecimal Numbering System; 2.3: Data Organization; 2.4: Arithmetic Operations on Binary and Hexadecimal Numbers; 2.5: A Note About Numbers vs. Representation; 2.6: Logical Operations on Bits; 2.7: Logical Operations on Binary Numbers and Bit Strings; 2.8: Signed and Unsigned Numbers; 2.9: Sign Extension, Zero Extension, Contraction, and Saturation; 2.10: Shifts and Rotates; 2.11: Bit Fields and Packed Data; 2.12: An Introduction to Floating-Point Arithmetic; 2.13: Binary-Coded Decminal Representation; 2.14: Characters 2.15: The Unicode Character Set2.16: For More Information; Chapter 3: Memory Access and Organization; 3.1: The 80x86 Addressing Modes; 3.2: Runtime Memory Organization; 3.3: How HLA Allocates Memory for Variables; 3.4: HLA Support for Data Alignment; 3.5: Address

Expressions; 3.6: Type Coercion; 3.7: Register Type Coercion; 3.8: The stack Segment and the push and pop Instructions; 3.9: The Stack Is a LIFO Data Structure; 3.10: Accessing Data You've Pushed onto the Stack Without Popping It; 3.11: Dynamic Memory Allocation and the Heap Segment; 3.12: The inc and dec Instructions
3.13: Obtaining the Address of a Memory Object3.14: For More Information; Chapter 4: Constants, Variables, and Data Types; 4.1: Some Additional Instructions: intmul, bound, into; 4.2: HLA Constant and Value Declarations; 4.3: The HLA Type Section; 4.4: enum and HLA Enumerated Data Types; 4.5: Pointer Data Types; 4.6: Composite Data Types; 4.7: Character Strings; 4.8: HLA Strings; 4.9: Accessing the Characters Within a String; 4.10: The HLA String Module and Other String-Related Routines; 4.11: In-Memory Conversions; 4.12: Character Sets; 4.13: Character Set Implementation in HLA
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4.28: Arrays/Records as Record Fields

Sommario/riassunto

Widely respected by hackers of all kinds, The Art of Assembly Language teaches programmers how to understand assembly language and how to use it to write powerful, efficient code. Using the proven High Level Assembler (HLA) as its primary teaching tool, The Art of Assembly Language leverages your knowledge of high level programming languages to make it easier for you to quickly grasp basic assembly concepts. Among the most comprehensive references to assembly language ever published, The Art of Assembly Language, 2nd Edition has been thoroughly updated to reflect recent changes to the HLA lang
