

1. Record Nr.	UNINA9910455945403321
Autore	Klein A. M (Abraham Moses), <1909-1972, >
Titolo	The second scroll / / A. M. Klein ; edited by Elizabeth Popham and Zailig Pollock
Pubbl/distr/stampa	Toronto, [Ontario] ; ; Buffalo, [New York] ; ; London, [England] : , : University of Toronto Press, , 2000 ©2000
ISBN	1-282-03725-0 9786612037252 1-4426-8232-9
Descrizione fisica	1 online resource (280 p.)
Collana	Collected works of A. M. Klein
Disciplina	813.52
Soggetti	Judaism Jews Canadians - Israel Holocaust survivors Jews - Canada Uncles Electronic books. Israel Fiction
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Frontmatter -- Contents -- INTRODUCTION -- EDITORIAL PROCEDURES -- ACKNOWLEDGMENTS -- BIOGRAPHICAL CHRONOLOGY -- THE SECOND SCROLL -- GLOSS ALEPH: Autobiographical -- GLOSS BETH: Elegy -- GLOSS GIMEL: Excerpt from Letter: 'On First Seeing the Ceiling of the Sistine Chapel' -- GLOSS DALID: The Three Judgments -- GLOSS HAI -- FOR THE DAY: Psalm the Thirtieth -- ABBREVIATIONS -- TEXTUAL NOTES -- EXPLANATORY NOTES -- APPENDIX A: Selections from 'Notebook of a Journey' -- APPENDIX B: Transcription of Speech on Trip to Israel [24 October 1949]; Manuscript Notes for Speaking Engagements -- APPENDIX C: Memorandum on Trip to Israel
Sommario/riassunto	The Second Scroll, the only novel by poet A.M. Klein, is an ambitious

and complex work that interlaces prose, poetry, drama, and commentary. The narrative follows a Canadian Jew to the newly established state of Israel on a double mission - to collect the emerging national literature and to search for his Uncle Melech Davidson, a Holocaust survivor. Klein creates a modern Torah out of the uncle's crises of faith as he attempts to come to terms with the atrocities of the Second World War. The five chapters of *The Second Scroll* mirror the books of the Pentateuch (the 'first scroll') and the language is rich with biblical, talmudic, kabbalistic, and literary allusions as both the narrator and his uncle wrestle with the meaning of Jewish identity, messianic faith, and homecoming. Popham and Pollock's scholarly edition re-creates the feel of the Knopf publication of 1951 - now a collector's item - but restores the text to Klein's original vision. This includes echoing the architectural structure of the Sistine Chapel in the physical layout of 'Gloss Gimel,' Klein's powerful commentary on Michelangelo's famous ceiling. Extensive annotations, and appendices that cross-reference the finished book to the raw material gathered during the author's trip to Israel and to the fund-raising speeches he delivered on his return, give the reader access to the process by which the novel took shape. A significant addition to UTP's Collected Works of A.M. Klein, and of interest not only to Klein scholars, *The Second Scroll* marks the inception of Holocaust literature and holds a central place in the Canadian literary canon.

2. Record Nr.	UNINA9910154777003321
Autore	Irvine Kip R. <1951->
Titolo	Assembly language for x86 processors // Kip R. Irvine
Pubbl/distr/stampa	Boston : , : Pearson, , [2015] ©2015
ISBN	1-292-06655-5
Edizione	[Seventh, Global edition.]
Descrizione fisica	1 online resource (177 pages) : illustrations, charts, tables
Collana	Always Learning
Disciplina	005.265
Soggetti	IBM microcomputers - Programming
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Cover -- Contents -- Preface -- About the Author -- Chapter 1: Basic Concepts -- 1.1 Welcome to Assembly Language -- 1.1.1 Questions You Might Ask -- 1.1.2 Assembly Language Applications -- 1.1.3 Section Review -- 1.2 Virtual Machine Concept -- 1.2.1 Section Review -- 1.3 Data Representation -- 1.3.1 Binary Integers -- 1.3.2 Binary Addition -- 1.3.3 Integer Storage Sizes -- 1.3.4 Hexadecimal Integers -- 1.3.5 Hexadecimal Addition -- 1.3.6 Signed Binary Integers -- 1.3.7 Binary Subtraction -- 1.3.8 Character Storage -- 1.3.9 Section Review -- 1.4 Boolean Expressions -- 1.4.1 Truth Tables for Boolean Functions -- 1.4.2 Section Review -- 1.5 Chapter Summary -- 1.6 Key Terms -- 1.7 Review Questions and Exercises -- 1.7.1 Short Answer -- 1.7.2 Algorithm Workbench -- Chapter 2: x86 Processor Architecture -- 2.1 General Concepts -- 2.1.1 Basic Microcomputer Design -- 2.1.2 Instruction Execution Cycle -- 2.1.3 Reading from Memory -- 2.1.4 Loading and Executing a Program -- 2.1.5 Section Review -- 2.2 32-Bit x86 Processors -- 2.2.1 Modes of Operation -- 2.2.2 Basic Execution Environment -- 2.2.3 x86 Memory Management -- 2.2.4 Section Review -- 2.3 64-Bit x86-64 Processors -- 2.3.1 64-Bit Operation Modes -- 2.3.2 Basic 64-Bit Execution Environment -- 2.4 Components of a Typical x86 Computer -- 2.4.1 Motherboard -- 2.4.2 Memory -- 2.4.3 Section Review -- 2.5 Input-Output System -- 2.5.1 Levels of I/O Access -- 2.5.2 Section Review -- 2.6 Chapter Summary -- 2.7 Key Terms -- 2.8 Review Questions -- Chapter 3: Assembly Language Fundamentals -- 3.1 Basic Language Elements -- 3.1.1 First Assembly

Language Program -- 3.1.2 Integer Literals -- 3.1.3 Constant Integer Expressions -- 3.1.4 Real Number Literals -- 3.1.5 Character Literals -- 3.1.6 String Literals -- 3.1.7 Reserved Words -- 3.1.8 Identifiers -- 3.1.9 Directives -- 3.1.10 Instructions.
3.1.11 Section Review -- 3.2 Example: Adding and Subtracting Integers -- 3.2.1 The AddTwo Program -- 3.2.2 Running and Debugging the AddTwo Program -- 3.2.3 Program Template -- 3.2.4 Section Review -- 3.3 Assembling, Linking, and Running Programs -- 3.3.1 The Assemble-Link-Execute Cycle -- 3.3.2 Listing File -- 3.3.3 Section Review -- 3.4 Defining Data -- 3.4.1 Intrinsic Data Types -- 3.4.2 Data Definition Statement -- 3.4.3 Adding a Variable to the AddTwo Program -- 3.4.4 Defining BYTE and SBYTE Data -- 3.4.5 Defining WORD and SWORD Data -- 3.4.6 Defining DWORD and SDWORD Data -- 3.4.7 Defining QWORD Data -- 3.4.8 Defining Packed BCD (TBYTE) Data -- 3.4.9 Defining Floating-Point Types -- 3.4.10 A Program That Adds Variables -- 3.4.11 Little-Endian Order -- 3.4.12 Declaring Uninitialized Data -- 3.4.13 Section Review -- 3.5 Symbolic Constants -- 3.5.1 Equal-Sign Directive -- 3.5.2 Calculating the Sizes of Arrays and Strings -- 3.5.3 EQU Directive -- 3.5.4 TEXTEQU Directive -- 3.5.5 Section Review -- 3.6 64-Bit Programming -- 3.7 Chapter Summary -- 3.8 Key Terms -- 3.8.1 Terms -- 3.8.2 Instructions, Operators, and Directives -- 3.9 Review Questions and Exercises -- 3.9.1 Short Answer -- 3.9.2 Algorithm Workbench -- 3.10 Programming Exercises -- Chapter 4: Data Transfers, Addressing, and Arithmetic -- 4.1 Data Transfer Instructions -- 4.1.1 Introduction -- 4.1.2 Operand Types -- 4.1.3 Direct Memory Operands -- 4.1.4 MOV Instruction -- 4.1.5 Zero/Sign Extension of Integers -- 4.1.6 LAHF and SAHF Instructions -- 4.1.7 XCHG Instruction -- 4.1.8 Direct-Offset Operands -- 4.1.9 Example Program (Moves) -- 4.1.10 Section Review -- 4.2 Addition and Subtraction -- 4.2.1 INC and DEC Instructions -- 4.2.2 ADD Instruction -- 4.2.3 SUB Instruction -- 4.2.4 NEG Instruction -- 4.2.5 Implementing Arithmetic Expressions.
4.2.6 Flags Affected by Addition and Subtraction -- 4.2.7 Example Program -- 4.2.8 Section Review -- 4.3 Data-Related Operators and Directives -- 4.3.1 OFFSET Operator -- 4.3.2 ALIGN Directive -- 4.3.3 PTR Operator -- 4.3.4 TYPE Operator -- 4.3.5 LENGTHOF Operator -- 4.3.6 SIZEOF Operator -- 4.3.7 LABEL Directive -- 4.3.8 Section Review -- 4.4 Indirect Addressing -- 4.4.1 Indirect Operands -- 4.4.2 Arrays -- 4.4.3 Indexed Operands -- 4.4.4 Pointers -- 4.4.5 Section Review -- 4.5 JMP and LOOP Instructions -- 4.5.1 JMP Instruction -- 4.5.2 LOOP Instruction -- 4.5.3 Displaying an Array in the Visual Studio Debugger -- 4.5.4 Summing an Integer Array -- 4.5.5 Copying a String -- 4.5.6 Section Review -- 4.6 64-Bit Programming -- 4.6.1 MOV Instruction -- 4.6.2 64-Bit Version of SumArray -- 4.6.3 Addition and Subtraction -- 4.6.4 Section Review -- 4.7 Chapter Summary -- 4.8 Key Terms -- 4.8.1 Terms -- 4.8.2 Instructions, Operators, and Directives -- 4.9 Review Questions and Exercises -- 4.9.1 Short Answer -- 4.9.2 Algorithm Workbench -- 4.10 Programming Exercises -- Chapter 5: Procedures -- 5.1 Stack Operations -- 5.1.1 Runtime Stack (32-Bit Mode) -- 5.1.2 PUSH and POP Instructions -- 5.1.3 Section Review -- 5.2 Defining and Using Procedures -- 5.2.1 PROC Directive -- 5.2.2 CALL and RET Instructions -- 5.2.3 Nested Procedure Calls -- 5.2.4 Passing Register Arguments to Procedures -- 5.2.5 Example: Summing an Integer Array -- 5.2.6 Saving and Restoring Registers -- 5.2.7 Section Review -- 5.3 Linking to an External Library -- 5.3.1 Background Information -- 5.3.2 Section Review -- 5.4 The Irvine32 Library -- 5.4.1 Motivation for Creating the Library -- 5.4.2 Overview -- 5.4.3 Individual Procedure Descriptions -- 5.4.4 Library Test

Programs -- 5.4.5 Section Review -- 5.5 64-Bit Assembly Programming
-- 5.5.1 The Irvine64 Library.
5.5.2 Calling 64-Bit Subroutines -- 5.5.3 The x64 Calling Convention
-- 5.5.4 Sample Program that Calls a Procedure -- 5.6 Chapter
Summary -- 5.7 Key Terms -- 5.7.1 Terms -- 5.7.2 Instructions,
Operators, and Directives -- 5.8 Review Questions and Exercises --
5.8.1 Short Answer -- 5.8.2 Algorithm Workbench -- 5.9 Programming
Exercises -- Chapter 6: Conditional Processing -- 6.1 Conditional
Branching -- 6.2 Boolean and Comparison Instructions -- 6.2.1 The
CPU Status Flags -- 6.2.2 AND Instruction -- 6.2.3 OR Instruction --
6.2.4 Bit-Mapped Sets -- 6.2.5 XOR Instruction -- 6.2.6 NOT
Instruction -- 6.2.7 TEST Instruction -- 6.2.8 CMP Instruction -- 6.2.9
Setting and Clearing Individual CPU Flags -- 6.2.10 Boolean
Instructions in 64-Bit Mode -- 6.2.11 Section Review -- 6.3
Conditional Jumps -- 6.3.1 Conditional Structures -- 6.3.2 Jcond
Instruction -- 6.3.3 Types of Conditional Jump Instructions -- 6.3.4
Conditional Jump Applications -- 6.3.5 Section Review -- 6.4
Conditional Loop Instructions -- 6.4.1 LOOPZ and LOOPE Instructions
-- 6.4.2 LOOPNZ and LOOPNE Instructions -- 6.4.3 Section Review --
6.5 Conditional Structures -- 6.5.1 Block-Structured IF Statements --
6.5.2 Compound Expressions -- 6.5.3 WHILE Loops -- 6.5.4 Table-
Driven Selection -- 6.5.5 Section Review -- 6.6 Application: Finite-
State Machines -- 6.6.1 Validating an Input String -- 6.6.2 Validating a
Signed Integer -- 6.6.3 Section Review -- 6.7 Conditional Control Flow
Directives -- 6.7.1 Creating IF Statements -- 6.7.2 Signed and
Unsigned Comparisons -- 6.7.3 Compound Expressions -- 6.7.4
Creating Loops with .REPEAT and .WHILE -- 6.8 Chapter Summary --
6.9 Key Terms -- 6.9.1 Terms -- 6.9.2 Instructions, Operators, and
Directives -- 6.10 Review Questions and Exercises -- 6.10.1 Short
Answer -- 6.10.2 Algorithm Workbench -- 6.11 Programming
Exercises.
6.11.1 Suggestions for Testing Your Code -- 6.11.2 Exercise
Descriptions -- Chapter 7: Integer Arithmetic -- 7.1 Shift and Rotate
Instructions -- 7.1.1 Logical Shifts and Arithmetic Shifts -- 7.1.2 SHL
Instruction -- 7.1.3 SHR Instruction -- 7.1.4 SAL and SAR Instructions
-- 7.1.5 ROL Instruction -- 7.1.6 ROR Instruction -- 7.1.7 RCL and RCR
Instructions -- 7.1.8 Signed Overflow -- 7.1.9 SHLD/SHRD Instructions
-- 7.1.10 Section Review -- 7.2 Shift and Rotate Applications -- 7.2.1
Shifting Multiple Doublewords -- 7.2.2 Binary Multiplication -- 7.2.3
Displaying Binary Bits -- 7.2.4 Extracting File Date Fields -- 7.2.5
Section Review -- 7.3 Multiplication and Division Instructions -- 7.3.1
MUL Instruction -- 7.3.2 IMUL Instruction -- 7.3.3 Measuring Program
Execution Times -- 7.3.4 DIV Instruction -- 7.3.5 Signed Integer
Division -- 7.3.6 Implementing Arithmetic Expressions -- 7.3.7 Section
Review -- 7.4 Extended Addition and Subtraction -- 7.4.1 ADC
Instruction -- 7.4.2 Extended Addition Example -- 7.4.3 SBB
Instruction -- 7.4.4 Section Review -- 7.5 ASCII and Unpacked Decimal
Arithmetic -- 7.5.1 AAA Instruction -- 7.5.2 AAS Instruction -- 7.5.3
AAM Instruction -- 7.5.4 AAD Instruction -- 7.5.5 Section Review --
7.6 Packed Decimal Arithmetic -- 7.6.1 DAA Instruction -- 7.6.2 DAS
Instruction -- 7.6.3 Section Review -- 7.7 Chapter Summary -- 7.8 Key
Terms -- 7.8.1 Terms -- 7.8.2 Instructions, Operators, and Directives
-- 7.9 Review Questions and Exercises -- 7.9.1 Short Answer -- 7.9.2
Algorithm Workbench -- 7.10 Programming Exercises -- Chapter 8:
Advanced Procedures -- 8.1 Introduction -- 8.2 Stack Frames -- 8.2.1
Stack Parameters -- 8.2.2 Disadvantages of Register Parameters --
8.2.3 Accessing Stack Parameters -- 8.2.4 32-Bit Calling Conventions
-- 8.2.5 Local Variables -- 8.2.6 Reference Parameters -- 8.2.7 LEA

Instruction.

8.2.8 ENTER and LEAVE Instructions.

Sommario/riassunto

Assembly Language for x86 Processors, 7e is suitable for undergraduate courses in assembly language programming and introductory courses in computer systems and computer architecture. Proficiency in one other programming language, preferably Java, C, or C++, is recommended. Written specifically for 32- and 64-bit Intel/Windows platform, this complete and fully updated study of assembly language teaches students to write and debug programs at the machine level. This text simplifies and demystifies concepts that students need to grasp before they can go on to more advanced computer architecture and operating systems courses. Students put theory into practice through writing software at the machine level, creating a memorable experience that gives them the confidence to work in any OS/machine-oriented environment.

Teaching and Learning Experience This program presents a better teaching and learning experience-for you and your students. It will help:

- Teach Effective Design Techniques:** Top-down program design demonstration and explanation allows students to apply techniques to multiple programming courses.
- Put Theory into Practice:** Students will write software at the machine level, preparing them to work in any OS/machine-oriented environment.
- Tailor the Text to Fit your Course:** Instructors can cover optional chapter topics in varying order and depth.
- Support Instructors and Students:** Visit the author's web site <http://asmirvine.com/> for chapter objectives, debugging tools, supplemental files, a Getting Started with MASM and Visual Studio 2012 tutorial, and more.