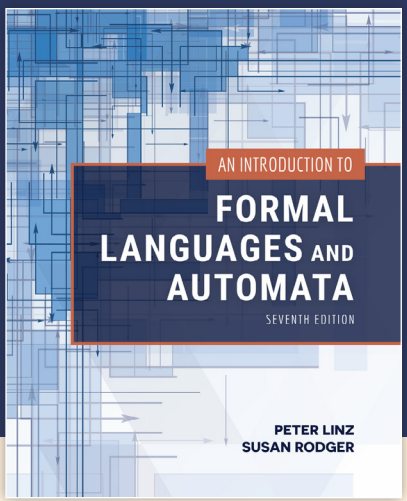


TRANSITION GUIDE TO

An Introduction to Formal Languages and Automata

SEVENTH EDITION

Peter Linz
Susan H. Rodger, PhD

ISBN: 978-1-284-23160-1
572 Pages | © 2023

This transition guide serves to outline the updates and new content found in ***An Introduction to Formal Languages and Automata, Seventh Edition*** by Peter Linz and Susan Rodger.

SUMMARY

An Introduction to Formal Languages and Automata, Seventh Edition is designed for an introductory course on formal languages, automata, computability, and related matters forming what is known as the theory of computation. The text takes a problem-solving approach, in which students' abilities are tested at various levels.

The ***Seventh Edition*** familiarizes students with the foundations and principles of computer science, teaches material useful in subsequent courses, and strengthens students' ability to carry out formal and rigorous mathematical arguments.

KEY UDPATES

- **NEW Introductory Exercises** help to bridge concepts to more difficult exercises
- Chapters 1-14 of the sixth edition, with the new exercises, are now reorganized as **Part I: Theory**
- **Three NEW chapters on parsing** are included in a new section, **Part 2: Applications**, and focus on how to apply theory from previous chapters into the real world
- **The accessible approach** allows student to clearly understand key content while retaining the appropriate mathematical notations and theorems required for the course
- **Central ideas** are preceded by a motivating example, drawn from applications, that introduces the concept and illustrates its usefulness.

INSTRUCTOR RESOURCES

- Image Bank
- Instructor's Solutions Manual
- Slides in PowerPoint Format

More on next page.

JONES & BARTLETT LEARNING
www.jblearning.com

Jones & Bartlett Learning | 25 Mall Road | Burlington, MA | 01803
www.jblearning.com | phone: 1-800-832-0034 | fax: 978-443-8000

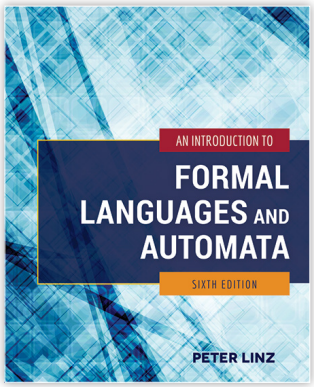
Source Code: Linz7e_TG

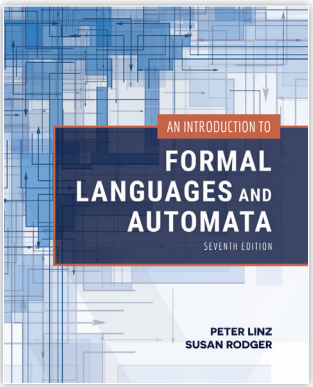
TRANSITION GUIDE TO

An Introduction to Formal Languages and Automata SEVENTH EDITION

CHAPTER OUTLINE

This chapter outline has been created to help you easily transition to the ***Seventh Edition***.
Note that chapter content from the Sixth Edition may now be found in a different chapter in the *Seventh Edition*.
Also note that chapter numbers and titles may have been updated.





SIXTH EDITION

CHAPTER 1	Introduction to the Theory of Computation
CHAPTER 2	Finite Automata
CHAPTER 3	Regular Languages and Regular Grammars
CHAPTER 4	Properties of Regular Languages
CHAPTER 5	Context-Free Languages
CHAPTER 6	Simplification of Context-Free Grammars and Normal Forms
CHAPTER 7	Pushdown Automata
CHAPTER 8	Properties of Context-Free Languages
CHAPTER 9	Turing Machines
CHAPTER 10	Other Models of Turing Machines
CHAPTER 11	A Hierarchy of Formal Languages and Automata
CHAPTER 12	Limits of Algorithmic Computation
CHAPTER 13	Other Models of Computation
CHAPTER 14	An Overview of Computational Complexity

SEVENTH EDITION

PART 1 Theory

CHAPTER 1	Introduction to the Theory of Computation
CHAPTER 2	Finite Automata
CHAPTER 3	Regular Languages and Regular Grammars
CHAPTER 4	Properties of Regular Languages
CHAPTER 5	Context-Free Languages
CHAPTER 6	Simplification of Context-Free Grammars and Normal Forms
CHAPTER 7	Pushdown Automata
CHAPTER 8	Properties of Context-Free Languages
CHAPTER 9	Turing Machines
CHAPTER 10	Other Models of Turing Machines
CHAPTER 11	A Hierarchy of Formal Languages and Automata
CHAPTER 12	Limits of Algorithmic Computation
CHAPTER 13	Other Models of Computation
CHAPTER 14	An Overview of Computational Complexity

PART 2 Applications

CHAPTER 15	Compilers AND PARSING
CHAPTER 16	LL Parsing
CHAPTER 17	LR Parsing

Jones & Bartlett Learning | 25 Mall Road | Burlington, MA | 01803
www.jblearning.com | phone: 1-800-832-0034 | fax: 978-443-8000

Source Code: Linz7e_TG