

- [Table of Contents](#)

Algorithms in Java, Third Edition, Part 5: Graph Algorithms

By [Robert Sedgewick](#)

Publisher: Addison Wesley
Pub Date: July 15, 2003
ISBN: 0-201-36121-3
Pages: 528

[Copyright](#)

[Preface](#)

[Algorithms](#)

[Scope](#)

[Use in the Curriculum](#)

[Algorithms of Practical Use](#)

[Programming Language](#)

[Acknowledgments](#)

[Java Consultant's Preface](#)

[Notes on Exercises](#)

[Part V: Graph Algorithms](#)

[Chapter 17. Graph Properties and Types](#)

[Section 17.1. Glossary](#)

[Section 17.2. Graph ADT](#)

[Section 17.3. Adjacency-Matrix Representation](#)

[Section 17.4. Adjacency-Lists Representation](#)

[Section 17.5. Variations, Extensions, and Costs](#)

[Section 17.6. Graph Generators](#)

[Section 17.7. Simple, Euler, and Hamilton Paths](#)

[Section 17.8. Graph-Processing Problems](#)

[Chapter 18. Graph Search](#)

[Section 18.1. Exploring a Maze](#)

[Section 18.2. Depth-First Search](#)

[Section 18.3. Graph-Search ADT Methods](#)

[Section 18.4. Properties of DFS Forests](#)

[Section 18.5. DFS Algorithms](#)

[Section 18.6. Separability and Biconnectivity](#)

[Section 18.7. Breadth-First Search](#)

[Section 18.8. Generalized Graph Search](#)

[Section 18.9. Analysis of Graph Algorithms](#)

[Chapter 19. Digraphs and DAGs](#)

[Exercises](#)

[Section 19.1. Glossary and Rules of the Game](#)

[Section 19.2. Anatomy of DFS in Digraphs](#)

[Section 19.3. Reachability and Transitive Closure](#)

[Section 19.4. Equivalence Relations and Partial Orders](#)

[Section 19.5. DAGs](#)

[Section 19.6. Topological Sorting](#)

[Section 19.7. Reachability in DAGs](#)

[Section 19.8. Strong Components in Digraphs](#)

[Section 19.9. Transitive Closure Revisited](#)

[Section 19.10. Perspective](#)

[Chapter 20. Minimum Spanning Trees](#)

[Exercises](#)

[Section 20.1. Representations](#)

[Section 20.2. Underlying Principles of MST Algorithms](#)

[Section 20.3. Prim's Algorithm and Priority-First Search](#)

[Section 20.4. Kruskal's Algorithm](#)

[Section 20.5. Boruvka's Algorithm](#)

[Section 20.6. Comparisons and Improvements](#)

[Section 20.7. Euclidean MST](#)

[Chapter 21. Shortest Paths](#)

[Exercises](#)

[Section 21.1. Underlying Principles](#)

[Section 21.2. Dijkstra's Algorithm](#)

[Section 21.3. All-Pairs Shortest Paths](#)

[Section 21.4. Shortest Paths in Acyclic Networks](#)

[Section 21.5. Euclidean Networks](#)

[Section 21.6. Reduction](#)

[Section 21.7. Negative Weights](#)

[Section 21.8. Perspective](#)

[Chapter 22. Network Flow](#)

[Section 22.1. Flow Networks](#)

[Section 22.2. Augmenting-Path Maxflow Algorithms](#)

[Section 22.3. Preflow-Push Maxflow Algorithms](#)

[Section 22.4. Maxflow Reductions](#)

[Section 22.5. Mincost Flows](#)

[Section 22.6. Network Simplex Algorithm](#)

[Section 22.7. Mincost-Flow Reductions](#)

[Section 22.8. Perspective](#)

[References for Part Five](#)

[\[Team LiB \]](#)