

Practice questions from the book

This refers to the 2nd edition of CLRS. Page and exercise numbers in parentheses () refer to the 3rd edition of CLRS. Exercises in brackets [] refer to harder exercises.

- Analyzing Algorithms:
 - page 21 (22): 2.1-3,4
 - page 27 (29): all exercises
 - page 36 (39): 2.3-3,4,5,6
 - page 37 (39): 2-1,2,3
- Asymptotic Notation:
 - page 50 (52): 3.1-1 - 3.1-6
 - page 58 (61): 3-2,3,4
- Recurrences:
 - page 67: 4.1-1,2,3,5 (page 87: 4.3-1,2,3,4,6,7,8)
 - page 72: 4.2-1,2,3,4, [4.2-5] (page 92: 4.4-1,2,3,4,5,6,7, [4.4-8,9])
 - page 75: 4.3-1,2,3 (page 96: 4.5-1,2,3)
 - page 85 (107): 4-1,3,4, [4-2]
 - page 741: 28.2-3,4,5,6 (page 82: 4.2-4,5,6,7)
- Probability and Randomized Algorithms:
 - page 1105: C.2-2, [C.2-3] (page 2294: C.2-1, [C.2-3])
 - page 1110 (1200): C.3-1,2,3,4
 - page 98 (122): 5.2-1,2,3,4
 - page 118 (143): 5-2
- Quicksort:
 - page 148 (173): all exercises
 - page 153 (178): 7.2-1,2,3
 - page 163 (189): 7-6
- Sorting:
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 - page 170 (196): 8.2-2,3,4
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- page 178 (206): 8-2,3
- Order Statistics:
 - page 189 (219): 9.2-3,4
 - page 192 (223): 9.3-5,7,8, 9-1,2
- Augmenting Data Structures:
 - page 307 (344): 14.1-1,2,3,4,5, [14.1-6]
 - page 310 (347): 14.2-1,2,3
 - page 317 (353): 14.3-3,5, [14.3-4]
- Red-Black Trees:
 - page 276 (311): 13.1-1,2,3,4,5,6
 - page 278 (313): 13.2-1,2,3
 - page 287 (322): 13.3-2
- B-Trees:
 - page 440 (490): 18.1-1,2,3,4
 - page 447 (497): 18.2-1,3,6
- Dynamic Programming:
 - page 338 (378): 15.2-1,3
 - page 349 (389): 15.3-2,3
 - page 355 (396): 15.4-1,2,3,4
- Greedy Algorithms:
 - page 384 (427): 16.2-1,2,4
- Amortized Analysis:
 - page 409 (456): 17.1-1,3
 - page 412 (458): 17.2-1,2,3
 - page 416 (462): 17.3-2 [17.3-3]
- Disjoint Sets Data Structures:
 - page 501: 21.1,2,3 (page 564: 21.1-1,2,3)
 - page 504: 21.2-1,2,3,4 (page 567: 21.2-1,2,3,4)
 - page 509: 21.3-1,3 (page 572: 21.3-1,3)
- Graph Algorithms:
 - page 530 (592): 22.1-1,2,3,4,5 [22.1-6]
 - page 538: 22.2-1,2,3,5,8 (page 601: 22.2-1,2,3,6,9)

- page 547: 22.3-2,9,10,11 (page 610: 22.3-2,10,11,12)
- page 551 (614): 22.4-1
- page 558 (621): 22-1
- Minimum Spanning Trees:
 - page 567 (629): 23.1-8,9
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- Shortest Paths:
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- NP-Completeness:
 - page 983 (1065): 34.2-2,6
 - page 1017 (1100): 34.5-1,2,3,5,7
- Approximation Algorithms:
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