

CS5592 Suggestions in preparation for Quiz # 2

1. Dynamic Programming: Please read, study and understand section 1 of the DP-handout and the corresponding chapters/sections in the textbook.
2. DP: Matrix Chain Products (MC): Please read, study and understand section 3 of the DP-hand-out and the corresponding chapters/sections in the textbook. I suggest you look at the undergraduate questions on page 9 to refresh your mechanical understanding, followed by the 3 graduate questions.
3. DP: Optimal Binary Search Trees for Average Performance, OBST: Please read, study and understand section 4 of the DP-hand-out and the corresponding chapters/sections in the textbook. I suggest you look at the undergraduate questions on page 15 to refresh your mechanical understanding, followed by the graduate questions 2, 4, 5, and 6.
4. DP: Optimal Rod-Cutting, ORC: Please read, study and understand section 6 of the DP-hand-out and the corresponding chapters/sections in the textbook. I suggest you look at the questions on page 18 and 19.
5. DP: Knapsack Problem, KP: Please read, study and understand section 8 of the DP-hand-out and the corresponding chapters/sections in the textbook. I suggest you look at the undergraduate questions on page 23 to refresh your mechanical understanding, followed by the graduate questions 6, 7, 8, and 12.
6. DP: Longest Common Subsequence, LCS: Please read, study and understand section 9 of the DP-hand-out and the corresponding chapters/sections in the textbook. I suggest you look at the undergraduate question on page 25 to refresh your mechanical understanding, followed by the graduate questions 2 and 3.
7. DP: Sequence Alignment, SA: Please read, study and understand section 10 of the DP-hand-out and the corresponding chapters/sections in the textbook. I suggest you look at the suggested exercise on page 28.
8. DP: Maximum Independent Set of a Tree, MIST: Please read, study and understand section 12 of the DP-hand-out and the corresponding chapters/sections in the textbook. I suggest you look at the suggested exercise on page 31.
9. DP: Others: Please read, study and understand section 13 of the DP-hand-out and the corresponding chapters/sections in the textbook.
10. Graphs/Networks: Please read, study and understand sections 1 and 2 of the GN-handout and the corresponding chapters/sections in the textbook thoroughly. I suggest you actually do all the undergraduate questions on page 10 and look at the graduate questions 20, 21, 22, 2 and 3.