You can check your **scores** here: [https://docs.google.com/spreadsheets/d/13a3Q--hrA9Tx-IppNPD7uzdbi3DTaZZyjiAUb5b2VR0](https://www.google.com/url?q=https://docs.google.com/spreadsheets/d/13a3Q--hrA9Tx-IppNPD7uzdbi3DTaZZyjiAUb5b2VR0&sa=D&source=hangouts&ust=1558438943798000&usg=AFQjCNFDF4B8NpHii4NCu6TBo9qN7W8N6A)

**Kindly go through the following things to get a head-start for our course on Problem Solving:**  
  
1. Brush up your language of choice for this course: C/C++/Java/python/C# - data types, operators, variables, read/write, loops, if-else, functions, declaring arrays/matrices/strings, using hashmaps, code modularisation, indentation etc.  
  
2. Brush up basics of Data Structures: Arrays/Matrices/Strings, Recursion, Stacks, Queues, LinkedLists, Trees etc. You can use: [http://www.geeksforgeeks.org/data-structures/](https://www.google.com/url?q=http://www.geeksforgeeks.org/data-structures/&sa=D&source=hangouts&ust=1558433226491000&usg=AFQjCNGPE9Yq50z6_GAikoFBv34XUnVrgQ)  
  
3. Brush up basics of Algorithms: Searching [Linear/Binary], Sorting [Bubble/Insertion/Selection/Merge/Quick], Hashing Techniques etc. You can use: [http://www.geeksforgeeks.org/fundamentals-of-algorithms/](https://www.google.com/url?q=http://www.geeksforgeeks.org/fundamentals-of-algorithms/&sa=D&source=hangouts&ust=1558433226491000&usg=AFQjCNHPcHd99tiYg4ik-fyAbVza1wCLQg)  
  
4. Try solving atleast 30-40 basic problems from each of the following links. Its okay if you are unable to solve even a single problem, but atleast give it your best shot.  
  
a. [https://www.hackerrank.com/domains/algorithms/warmup](https://www.google.com/url?q=https://www.hackerrank.com/domains/algorithms/warmup&sa=D&source=hangouts&ust=1558433226491000&usg=AFQjCNFg-ok9tzhjPryeYoTb4FTHQyAAig)  
  
b. [https://www.hackerrank.com/domains/algorithms/implementation](https://www.google.com/url?q=https://www.hackerrank.com/domains/algorithms/implementation&sa=D&source=hangouts&ust=1558433226491000&usg=AFQjCNHp34hxV1veka09PFUXfRJnBx9PhA)  
  
c. [http://codeforces.com/problemset?order=BY\_SOLVED\_DESC](https://www.google.com/url?q=http://codeforces.com/problemset?order%3DBY_SOLVED_DESC&sa=D&source=hangouts&ust=1558433226492000&usg=AFQjCNHGBNbjZhIIIJ66AaVj1WwvjdWixA)  
  
d. [https://www.codechef.com/problems/school?sort\_by=SuccessfulSubmission&sorting\_order=desc](https://www.google.com/url?q=https://www.codechef.com/problems/school?sort_by%3DSuccessfulSubmission%26sorting_order%3Ddesc&sa=D&source=hangouts&ust=1558433226492000&usg=AFQjCNEi3FfAjkHDDcOnhAyffZlefTYzSg)  
  
e. [https://www.hackerrank.com/contests/smart-interviews/](https://www.google.com/url?q=https://www.hackerrank.com/contests/smart-interviews/&sa=D&source=hangouts&ust=1558433226492000&usg=AFQjCNHe0uokYccFzIyVP6UJ5L_7S-vqfQ)  
  
5. Add yourself to the fb group "Smart Interviews Discussions" [ [https://www.facebook.com/groups/1548396065474189](https://www.google.com/url?q=https://www.facebook.com/groups/1548396065474189&sa=D&source=hangouts&ust=1558433226492000&usg=AFQjCNGE8V-bh0QJ1guf6ypM1YXAUlobmA" \t "_blank)/ ] and read through the important posts [linked in the pin-post].  
  
Smart Interviews - Learn | Evolve | Excel

All the students must go through the course related details like Prerequisites, Course Outline, Timings, Duration, Course Fee, Address etc at [http://www.smartinterviews.in/assets/SmartInterviews-CourseOutline.pdf](https://www.google.com/url?q=http://www.smartinterviews.in/assets/SmartInterviews-CourseOutline.pdf&sa=D&source=hangouts&ust=1558439472245000&usg=AFQjCNEMfkAZ9Xv9iSZ3Avj1c_7SHvMyiw)

[24/12, 1:12 PM] Smart Interview: \***Materials for all the topics discussed so far:\***1. \*Programming Essentials\* - [https://drive.google.com/file/d/1EuYeu29E0aIMcagdQ5ndSSv7frdzNTre/view?usp=sharing](https://www.google.com/url?q=https://drive.google.com/file/d/1EuYeu29E0aIMcagdQ5ndSSv7frdzNTre/view?usp%3Dsharing&sa=D&source=hangouts&ust=1558433226486000&usg=AFQjCNFQEmvV_sHkz3wGGa3gvptJaJvj4g)  
  
2. \*Data Types, Operators and Bit Manipulations\* - [https://drive.google.com/file/d/1PpT8Vqwb9NaTWwv\_QVpgMfA\_ZItx6CVX/view?usp=sharing](https://www.google.com/url?q=https://drive.google.com/file/d/1PpT8Vqwb9NaTWwv_QVpgMfA_ZItx6CVX/view?usp%3Dsharing&sa=D&source=hangouts&ust=1558433226486000&usg=AFQjCNHBMzZ5obBlnejHoH2iQAZETC2faQ)  
  
3. \*Complexity Analysis of Algorithms\* - [https://drive.google.com/file/d/1rRKCo1BPZU8TQ0SdPOvyiZ8FBvhgyC4B/view?usp=sharing](https://www.google.com/url?q=https://drive.google.com/file/d/1rRKCo1BPZU8TQ0SdPOvyiZ8FBvhgyC4B/view?usp%3Dsharing&sa=D&source=hangouts&ust=1558433226486000&usg=AFQjCNGgIunc0GQ-0xhhq1iXZKCmKlYsDw)  
  
4. \*Complexity Analysis Problem Set\* - [https://drive.google.com/file/d/1q9cHNUThCZaajYu1tZtwI4gU35Ss4N5C/view?usp=sharing](https://www.google.com/url?q=https://drive.google.com/file/d/1q9cHNUThCZaajYu1tZtwI4gU35Ss4N5C/view?usp%3Dsharing&sa=D&source=hangouts&ust=1558433226486000&usg=AFQjCNHFcr9xAhimB7-4rOD2qcMkNtACsg)  
  
5. \*Complexity Analysis Solution Set\* - [https://drive.google.com/file/d/1KjBUuzRoDNvCAgu\_LpabdB8oLsW1W6Y3/view?usp=sharing](https://www.google.com/url?q=https://drive.google.com/file/d/1KjBUuzRoDNvCAgu_LpabdB8oLsW1W6Y3/view?usp%3Dsharing&sa=D&source=hangouts&ust=1558433226486000&usg=AFQjCNHCIMLrdqqZ4mtaLeOzTDaScmUkLw)  
  
6. \*Recursion\* - [https://drive.google.com/file/d/19YF-ImSsdbUebJkg\_h-lXXzMIg9Rmis9/view?usp=sharing](https://www.google.com/url?q=https://drive.google.com/file/d/19YF-ImSsdbUebJkg_h-lXXzMIg9Rmis9/view?usp%3Dsharing&sa=D&source=hangouts&ust=1558433226486000&usg=AFQjCNEOjXMBBi1hjIksy3R9g2LGFhX4rg)  
  
7. \*Sorting\* - [https://drive.google.com/file/d/15xfXxH3hBcv28Whthqmtty96murPKLss/view?usp=sharing](https://www.google.com/url?q=https://drive.google.com/file/d/15xfXxH3hBcv28Whthqmtty96murPKLss/view?usp%3Dsharing&sa=D&source=hangouts&ust=1558433226487000&usg=AFQjCNEw2NLtWLYCFZacPKgF2-lbVXQr9Q)  
  
8. \*Searching\* - [https://drive.google.com/file/d/1N3QbRzJiZBbB\_qs3ojeQVET3SaPFUGUo/view?usp=sharing](https://www.google.com/url?q=https://drive.google.com/file/d/1N3QbRzJiZBbB_qs3ojeQVET3SaPFUGUo/view?usp%3Dsharing&sa=D&source=hangouts&ust=1558433226487000&usg=AFQjCNF7nC6foVkUC2vf5TKzHqm83icayQ)  
  
9. \*Hashing\* - [https://drive.google.com/file/d/11hqPCUhg31vzzV\_NBI8xwyaDTsud0W6K/view?usp=sharing](https://www.google.com/url?q=https://drive.google.com/file/d/11hqPCUhg31vzzV_NBI8xwyaDTsud0W6K/view?usp%3Dsharing&sa=D&source=hangouts&ust=1558433226487000&usg=AFQjCNFZKn8Or3DhZfzxbmMMGqVuiMkRoA)  
  
10. \*Strings\* - [https://drive.google.com/file/d/14s8oalPkA5mtPOYvMD-kzc031rkKerud/view?usp=sharing](https://www.google.com/url?q=https://drive.google.com/file/d/14s8oalPkA5mtPOYvMD-kzc031rkKerud/view?usp%3Dsharing&sa=D&source=hangouts&ust=1558433226487000&usg=AFQjCNEQdLe6kTLCFeoN8ZHrgCrzAGDYBA)  
  
11. \*Mixed-bag\* - [https://drive.google.com/file/d/1rtVH32Sxgc6D\_4miMd9zZJQrHpz6pqgf/view?usp=sharing](https://www.google.com/url?q=https://drive.google.com/file/d/1rtVH32Sxgc6D_4miMd9zZJQrHpz6pqgf/view?usp%3Dsharing&sa=D&source=hangouts&ust=1558433226487000&usg=AFQjCNEdxn_NiL2ylqLxuZX1cW_vx0HAQA)

**\*To all those who haven't started working on the assignments yet**, first try the following problems from [https://www.hackerrank.com/contests/smart-interviews](https://www.google.com/url?q=https://www.hackerrank.com/contests/smart-interviews&sa=D&source=hangouts&ust=1558438943795000&usg=AFQjCNFkmw4PuXo_A9oZQnKAYJZeSjOFig) . They are the easiest ones, or has been discussed in our sessions. It'll help you gain confidence and improve your OverallScore and Rank in the Batch-8 excel sheet:\*  
  
1. Print Right Angled Triangle Pattern  
2. Sum of array elements  
3. Rotation of Matrix  
4. Binary Representation  
5. Check Power of Two  
6. Finding Missing Number  
7. Flip Bits  
8. Compute a power b  
9. Repeated Numbers  
10. Triple Trouble  
11. Bubble Sort Adhoc  
12. Sum of Pairs  
13. Finding Frequency  
14. Find First Repeating Character  
15. Anagrams easy  
  
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[18/11, 8:51 PM] Smart Interview: \***Assignment-1**\*  
  
1. Atleast 20 problems from [https://www.hackerrank.com/domains/algorithms/implementation](https://www.google.com/url?q=https://www.hackerrank.com/domains/algorithms/implementation&sa=D&source=hangouts&ust=1558433226492000&usg=AFQjCNFiZbdYdXwMExFMNp6Q3d_Y-DOC5w)  
  
2. Atleast 15 problems from the 1st 20 problems in [https://www.hackerrank.com/contests/smart-interviews/](https://www.google.com/url?q=https://www.hackerrank.com/contests/smart-interviews/&sa=D&source=hangouts&ust=1558433226492000&usg=AFQjCNHe0uokYccFzIyVP6UJ5L_7S-vqfQ)  
  
3. All problems from [https://www.interviewbit.com/courses/programming/topics/time-complexity/#problems](https://www.google.com/url?q=https://www.interviewbit.com/courses/programming/topics/time-complexity/%23problems&sa=D&source=hangouts&ust=1558433226492000&usg=AFQjCNEphxnvgqwjPkKyW5Yx6Fh7yui1uQ)  
  
4. Atleast 5 problems from [https://www.interviewbit.com/courses/programming/topics/bit-manipulation/#problems](https://www.google.com/url?q=https://www.interviewbit.com/courses/programming/topics/bit-manipulation/%23problems&sa=D&source=hangouts&ust=1558433226493000&usg=AFQjCNGME29LGtL16zK_AmX1LjryCovONw)

\***Assignment-2\***  
  
1. 15 problems from "Tower of Hanoi Easy" to "Smaller Elements" in [https://www.hackerrank.com/contests/smart-interviews/challenges/filters/page:4](https://www.google.com/url?q=https://www.hackerrank.com/contests/smart-interviews/challenges/filters/page:4&sa=D&source=hangouts&ust=1558438943798000&usg=AFQjCNE6M6G7SkY1DpRrEXwmmThneDv5IA)  
  
2. Following problems from [https://www.hackerrank.com/domains/algorithms/implementation](https://www.google.com/url?q=https://www.hackerrank.com/domains/algorithms/implementation&sa=D&source=hangouts&ust=1558438943798000&usg=AFQjCNF1hUATY_wPPQtWBLsJts3JN1Be5Q) :  
a) Migratory Birds  
b) Sock Merchant  
c) Picking Numbers  
d) Non-Divisible Subset  
  
3. Atleast 10 problems from [https://www.interviewbit.com/courses/programming/topics/two-pointers/#problems](https://www.google.com/url?q=https://www.interviewbit.com/courses/programming/topics/two-pointers/%23problems&sa=D&source=hangouts&ust=1558438943798000&usg=AFQjCNGuwv2t1ipllYCedUieI-m0Z4UPKw)  
  
4. Atleast 5 problems from [https://www.interviewbit.com/courses/programming/topics/backtracking/#problems](https://www.google.com/url?q=https://www.interviewbit.com/courses/programming/topics/backtracking/%23problems&sa=D&source=hangouts&ust=1558438943798000&usg=AFQjCNFKXPOQSX4RBNjdwLlLPgB9XnGnBQ)  
  
\*Target:\* "Overall Score" >= 4000  
  
You can check your scores here: [https://docs.google.com/spreadsheets/d/13a3Q--hrA9Tx-IppNPD7uzdbi3DTaZZyjiAUb5b2VR0](https://www.google.com/url?q=https://docs.google.com/spreadsheets/d/13a3Q--hrA9Tx-IppNPD7uzdbi3DTaZZyjiAUb5b2VR0&sa=D&source=hangouts&ust=1558438943798000&usg=AFQjCNFDF4B8NpHii4NCu6TBo9qN7W8N6A)

[8:45 AM, 12/3/2018] Smart Interview: **Assignment-3**  
  
1. Following problems from [https://www.hackerrank.com/contests/smart-interviews/challenges](https://www.google.com/url?q=https://www.hackerrank.com/contests/smart-interviews/challenges&sa=D&source=hangouts&ust=1558433226490000&usg=AFQjCNE8zFMO_0uMhMT9UXoqb7Pq7ELsqA):  
  
a) Finding Frequency [Try to implement all the 7 solutions]  
b) Finding the floor  
c) Subsets of an array (print in lexicographical order)  
d) Distinct elements in Window  
e) Number of Valid Subarrays  
  
2. Redo the following problems using map/set from [https://www.hackerrank.com/contests/smart-interviews/challenges](https://www.google.com/url?q=https://www.hackerrank.com/contests/smart-interviews/challenges&sa=D&source=hangouts&ust=1558433226490000&usg=AFQjCNE8zFMO_0uMhMT9UXoqb7Pq7ELsqA):  
  
a) Finding Missing Number  
b) Repeated Numbers  
c) Triple Trouble  
  
3. Redo the following problems using inbuilt Sort from [https://www.hackerrank.com/contests/smart-interviews/challenges](https://www.google.com/url?q=https://www.hackerrank.com/contests/smart-interviews/challenges&sa=D&source=hangouts&ust=1558433226490000&usg=AFQjCNE8zFMO_0uMhMT9UXoqb7Pq7ELsqA):  
  
a) Finding Missing Number  
b) Repeated Numbers     
c) Triple Trouble  
d) Maximum Contiguous Subsequence  
  
4. Redo the following problems using inbuilt BinarySearch from [https://www.hackerrank.com/contests/smart-interviews/challenges](https://www.google.com/url?q=https://www.hackerrank.com/contests/smart-interviews/challenges&sa=D&source=hangouts&ust=1558433226490000&usg=AFQjCNE8zFMO_0uMhMT9UXoqb7Pq7ELsqA):  
  
a) Sum of Pairs  
b) Pair with Difference K  
c) Triplet with Sum K

[10/12, 2:13 PM] Smart Interview: \***All assignments combined**\*  
  
1. All problems from [https://www.hackerrank.com/contests/smart-interviews](https://www.google.com/url?q=https://www.hackerrank.com/contests/smart-interviews&sa=D&source=hangouts&ust=1558433226482000&usg=AFQjCNF-Wkk_yThtZVuKUHPPP6TcEDf68g)/ upto "Distinct Elements in Window" [Roughly 40 problems]  
  
2. Atleast 10 problems from each of the following sections on InterviewBit - [https://www.interviewbit.com/courses/programming/:](https://www.google.com/url?q=https://www.interviewbit.com/courses/programming/:&sa=D&source=hangouts&ust=1558433226482000&usg=AFQjCNHMGPbK8hgp2Ml5q_7peYJBni_TVg)  
  
Time Complexity/Arrays/Math/Binary Search/Bit Manipulation/Two Pointers/Backtracking/Hashing  
  
3. Atleast 30 problems from [https://www.hackerrank.com/domains/algorithms/implementation](https://www.google.com/url?q=https://www.hackerrank.com/domains/algorithms/implementation&sa=D&source=hangouts&ust=1558433226483000&usg=AFQjCNF8Sgntt2m5gr4m32fnbf95QUEXrw)  
  
4. Atleast 5 problems from each of the sections discussed from [https://www.hackerrank.com/domains/data-structures](https://www.google.com/url?q=https://www.hackerrank.com/domains/data-structures&sa=D&source=hangouts&ust=1558433226483000&usg=AFQjCNG04-cpjLSCJB9RXOkMOQcWGZmXDw)  
  
Minimum Target: Overall Score >= 6,000

[17/12, 12:46 AM] Smart Interview: \***Assignment-5**\*  
  
1. All problems from "Find First Repeating Character" to "Enclosing Substring" in [https://www.hackerrank.com/contests/smart-interviews/challenges/filters/page:6](https://www.google.com/url?q=https://www.hackerrank.com/contests/smart-interviews/challenges/filters/page:6&sa=D&source=hangouts&ust=1558433226483000&usg=AFQjCNEbKBr6ZgM9dWxQrjpjh_RbVE2Idg)  
  
2. At least 15 problems from [https://www.interviewbit.com/courses/programming/topics/strings/#problems](https://www.google.com/url?q=https://www.interviewbit.com/courses/programming/topics/strings/%23problems&sa=D&source=hangouts&ust=1558433226483000&usg=AFQjCNG0ERK4gfkHAX1Td2g6i-R6dCq4Dw)  
  
3. At least 20 problems on strings from [https://www.hackerrank.com/domains/algorithms/strings](https://www.google.com/url?q=https://www.hackerrank.com/domains/algorithms/strings&sa=D&source=hangouts&ust=1558433226484000&usg=AFQjCNHMf4N2hPtKshMRu2bmMFEzYgEKEQ)  
  
\*Target: "Overall Score" >= 8000\*

[24/12, 1:14 PM] Smart Interview: **\*Assignment-6\***  
  
1. Few problems from [https://www.hackerrank.com/domains/algorithms/game-theory](https://www.google.com/url?q=https://www.hackerrank.com/domains/algorithms/game-theory&sa=D&source=hangouts&ust=1558433226487000&usg=AFQjCNH-VdG8fXirzc1BOjUjYNgj0mwRQA)  
  
2. Following problems from [https://www.hackerrank.com/contests/smart-interviews/challenges](https://www.google.com/url?q=https://www.hackerrank.com/contests/smart-interviews/challenges&sa=D&source=hangouts&ust=1558433226487000&usg=AFQjCNE4XAGbQ9cp6BEkuHf3yrnK_E6JfQ):   
KMP String Matching Algorithm/Collecting Water/Sum of Subarrays/Prime Fear/Prime Coins/Game of Letters/Subsequence Sum/  
  
3. Following problems from SPOJ:   
ADACUT/ADAFRIEN/THREENUMBERS/TBATTLE/AGGRCOW/TDKPRIME/TDPRIMES/PRIME1  
  
Smart Interviews - Learn | Evolve | Excel  
[25/12, 10:09 AM] Smart Interview: \*All assignments combined\*  
  
1. First 60 problems from [https://www.hackerrank.com/contests/smart-interviews/](https://www.google.com/url?q=https://www.hackerrank.com/contests/smart-interviews/&sa=D&source=hangouts&ust=1558433226487000&usg=AFQjCNE6iIfXAKGVquLHieZcrgOC2hFo2w)  
  
2. Atleast 10 problems from each of the following sections on InterviewBit - [https://www.interviewbit.com/courses/programming/:](https://www.google.com/url?q=https://www.interviewbit.com/courses/programming/:&sa=D&source=hangouts&ust=1558433226487000&usg=AFQjCNFc0ULdAYxjSROjcggI1IUobRtDEw)  
  
Time Complexity/Arrays/Math/Binary Search/Bit Manipulation/Two Pointers/Strings/Hashing/Backtracking  
  
3. Atleast 40 problems from [https://www.hackerrank.com/domains/algorithms/implementation](https://www.google.com/url?q=https://www.hackerrank.com/domains/algorithms/implementation&sa=D&source=hangouts&ust=1558433226488000&usg=AFQjCNGk4Flf8Q9Cdh8gVYU8yMFF-6d46g)  
  
4. Atleast 5 problems from each of the sections discussed from [https://www.hackerrank.com/domains/data-structures](https://www.google.com/url?q=https://www.hackerrank.com/domains/data-structures&sa=D&source=hangouts&ust=1558433226488000&usg=AFQjCNFz7nJ63inpBcPx3u9LtHcnxLR4kQ)  
  
\*Target: "Overall Score" >= 10,000\*

**\*Assignment-7\***  
  
1. Atleast 8 problems from [https://hackerrank.com/domains/data-structures/linked-lists](https://www.google.com/url?q=https://hackerrank.com/domains/data-structures/linked-lists&sa=D&source=hangouts&ust=1558433218699000&usg=AFQjCNE-uQdEiBNrZ4oo8-0FmaZI52_LlQ)  
  
2. Atleast 5 problems from [https://www.interviewbit.com/courses/programming/topics/linked-lists#problems](https://www.google.com/url?q=https://www.interviewbit.com/courses/programming/topics/linked-lists%23problems&sa=D&source=hangouts&ust=1558433218699000&usg=AFQjCNEYpMAw43Llop0KI5zsNbpRD8B65g)  
  
3. Atleast 5 problems from [https://www.interviewbit.com/courses/programming/topics/stacks-and-queues/#problems](https://www.google.com/url?q=https://www.interviewbit.com/courses/programming/topics/stacks-and-queues/%23problems&sa=D&source=hangouts&ust=1558433218699000&usg=AFQjCNG1R7gg7ufemUDCmIA0Pe-jDOVh_w)  
  
4. All problems in [https://www.hackerrank.com/contests/smart-interviews/challenges/filters/page:7](https://www.google.com/url?q=https://www.hackerrank.com/contests/smart-interviews/challenges/filters/page:7&sa=D&source=hangouts&ust=1558433218699000&usg=AFQjCNEiQ1W4-Fb2vPDo6VLKQm6X823J3A) from “Subsequence Sum” to “Window Maximum”  
  
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**\*Assignment-8\***  
  
1. All problems from [https://hackerrank.com/domains/data-structures/linked-lists](https://www.google.com/url?q=https://hackerrank.com/domains/data-structures/linked-lists&sa=D&source=hangouts&ust=1558433218698000&usg=AFQjCNELAOYlm7uGKfzM_GSzYEkcOBJfKA)  
  
2. All problems from [https://www.interviewbit.com/courses/programming/topics/linked-lists#problems](https://www.google.com/url?q=https://www.interviewbit.com/courses/programming/topics/linked-lists%23problems&sa=D&source=hangouts&ust=1558433218698000&usg=AFQjCNFZ183Dq2JnkweddwLy0U0iiCO6Jw)  
  
3. Atleast 5 problems from [https://www.hackerrank.com/domains/data-structures/trees](https://www.google.com/url?q=https://www.hackerrank.com/domains/data-structures/trees&sa=D&source=hangouts&ust=1558433218699000&usg=AFQjCNHFRCRO2u1N7e5PeihUzIGHOpQz-A)  
  
4. Atleast 2 problems from [https://www.interviewbit.com/courses/programming/topics/tree-data-structure/#problems](https://www.google.com/url?q=https://www.interviewbit.com/courses/programming/topics/tree-data-structure/%23problems&sa=D&source=hangouts&ust=1558433218699000&usg=AFQjCNEDhxGvf5EQOd6gmyENOQuhy9efgg)  
  
5. Atleast 2 problems on trees from [https://www.hackerrank.com/contests/smart-interviews/challenges/filters/page:8](https://www.google.com/url?q=https://www.hackerrank.com/contests/smart-interviews/challenges/filters/page:8&sa=D&source=hangouts&ust=1558433218699000&usg=AFQjCNFTlGvGS6Wr6QcT8kp1nMdHKpmHvQ)  
  
\*Target: "Overall Score" >= 10000\*

**\*Assignment-9\***  
  
1. All problems from [https://www.hackerrank.com/domains/data-structures/trees](https://www.google.com/url?q=https://www.hackerrank.com/domains/data-structures/trees&sa=D&source=hangouts&ust=1558433218698000&usg=AFQjCNGxJ_t8IflfRVw83TWmD1KmKYWb5g)  
  
2. All problems from [https://www.interviewbit.com/courses/programming/topics/tree-data-structure/#problems](https://www.google.com/url?q=https://www.interviewbit.com/courses/programming/topics/tree-data-structure/%23problems&sa=D&source=hangouts&ust=1558433218698000&usg=AFQjCNGeNBnbHt1FIzpmGGInm5pRtbELzg)  
  
3. All problems on trees from [https://www.hackerrank.com/contests/smart-interviews/challenges/filters/page:8](https://www.google.com/url?q=https://www.hackerrank.com/contests/smart-interviews/challenges/filters/page:8&sa=D&source=hangouts&ust=1558433218698000&usg=AFQjCNHz_cCK9QPZY9zTprWTNo6jCeNTzg)  
  
\*Target: "Overall Score" >= 12 000\*

**\*Assignment-10\***  
  
1. All problems from [https://www.hackerrank.com/domains/data-structures/trie](https://www.google.com/url?q=https://www.hackerrank.com/domains/data-structures/trie&sa=D&source=hangouts&ust=1558433218697000&usg=AFQjCNEwBdreji5O9C5it-9HHTFb_yEpuw)  
  
2. All problems from [https://www.hackerrank.com/domains/data-structures/heap](https://www.google.com/url?q=https://www.hackerrank.com/domains/data-structures/heap&sa=D&source=hangouts&ust=1558433218697000&usg=AFQjCNHk_9MFRqYNpqEjIz8uehkeRaocoA)  
  
3. All problems in [https://www.hackerrank.com/contests/smart-interviews/challenges/filters/page:10](https://www.google.com/url?q=https://www.hackerrank.com/contests/smart-interviews/challenges/filters/page:10&sa=D&source=hangouts&ust=1558433218697000&usg=AFQjCNF-BTf0bCKESIAm9Y1wTvVchHaezw) from "Implement MinHeap" to "Arranging Dominos"  
  
4. All problems from [https://www.interviewbit.com/courses/programming/topics/heaps-and-maps/#problems](https://www.google.com/url?q=https://www.interviewbit.com/courses/programming/topics/heaps-and-maps/%23problems&sa=D&source=hangouts&ust=1558433218698000&usg=AFQjCNG_S-_6JUbaG0mPn7w_k9xT0mCsKw)  
   
5. [https://www.spoj.com/problems/SUBXOR](https://www.google.com/url?q=https://www.spoj.com/problems/SUBXOR&sa=D&source=hangouts&ust=1558433218698000&usg=AFQjCNHsx6pqEsV2hfcERIBJdjyaFPNxYw)/ or [https://www.codechef.com/problems/SUBBXOR](https://www.google.com/url?q=https://www.codechef.com/problems/SUBBXOR&sa=D&source=hangouts&ust=1558433218698000&usg=AFQjCNGVnUsv0FnUGWdE5EZOBDP4LqslKg)   
  
\*Target: "Overall Score" >= 15,000\*

**\*Assignment-11\***  
  
Assignment on Greedy & Dynamic Programming:  
  
1. All problems from "Compute nCr" to "Non adjacent set bits" in [https://www.hackerrank.com/contests/smart-interviews/challenges/filters/page:11](https://www.google.com/url?q=https://www.hackerrank.com/contests/smart-interviews/challenges/filters/page:11&sa=D&source=hangouts&ust=1558433218697000&usg=AFQjCNFzeB-DXpZkpYA-_OYat4841PhPxA)  
  
2. Atleast 10 problems from [https://www.interviewbit.com/courses/programming/topics/dynamic-programming/](https://www.google.com/url?q=https://www.interviewbit.com/courses/programming/topics/dynamic-programming/&sa=D&source=hangouts&ust=1558433218697000&usg=AFQjCNFwtWUKIYnYvG6a4PM9cpnlZVaQMA)  
  
3. Atleast 10 problems from [https://www.hackerrank.com/domains/algorithms/greedy](https://www.google.com/url?q=https://www.hackerrank.com/domains/algorithms/greedy&sa=D&source=hangouts&ust=1558433218697000&usg=AFQjCNGL0gwGitlPUt9QET2VbsyhrrPa9w)  
  
4. Atleast 10 problems from [https://www.hackerrank.com/domains/algorithms/dynamic-programming](https://www.google.com/url?q=https://www.hackerrank.com/domains/algorithms/dynamic-programming&sa=D&source=hangouts&ust=1558433218697000&usg=AFQjCNFercH_pDCNGH1UW5Oy-zcW4svPAQ)

[04/02, 11:28 AM] Smart Interview: \*Final Assignment\* **\*Assignment-12\***  
  
1. All problems from "Path in a graph" to "Minimum time to meet" from [https://www.hackerrank.com/contests/smart-interviews](https://www.google.com/url?q=https://www.hackerrank.com/contests/smart-interviews&sa=D&source=hangouts&ust=1558433218696000&usg=AFQjCNHfjTZRmkVrPS499-siMcZksJCoeg)  
  
2. At least 10 problems from [https://www.interviewbit.com/courses/programming/topics/graph-data-structure-algorithms/](https://www.google.com/url?q=https://www.interviewbit.com/courses/programming/topics/graph-data-structure-algorithms/&sa=D&source=hangouts&ust=1558433218696000&usg=AFQjCNHtvFRVCxgyhaLOHYjjeh5JCGGDRA)  
  
3. At least 10 problems on graph theory from [https://www.hackerrank.com/domains/algorithms](https://www.google.com/url?q=https://www.hackerrank.com/domains/algorithms&sa=D&source=hangouts&ust=1558433218696000&usg=AFQjCNEZ0wtHzkRjAdO84RJbtWixUhJPUg)  
  
Smart Interviews - Learn | Evolve | Excel  
[04/02, 11:29 AM] Smart Interview: Few more problems on Graph Theory:  
  
1. [http://www.spoj.com/problems/PT07Y/](https://www.google.com/url?q=http://www.spoj.com/problems/PT07Y/&sa=D&source=hangouts&ust=1558433218696000&usg=AFQjCNGQUmI8OWkVLenOC9j_YyvHkZUObw)  
  
2. [http://www.spoj.com/problems/GCPC11J/](https://www.google.com/url?q=http://www.spoj.com/problems/GCPC11J/&sa=D&source=hangouts&ust=1558433218696000&usg=AFQjCNFIp1uGSqDBUzTn7jwlcthE18eaaA)  
  
3. [http://www.spoj.com/problems/PT07Z/](https://www.google.com/url?q=http://www.spoj.com/problems/PT07Z/&sa=D&source=hangouts&ust=1558433218696000&usg=AFQjCNGL7qt-uNWqW-v_zVZamwncng_0TQ)  
  
4. [http://www.spoj.com/problems/MICEMAZE/](https://www.google.com/url?q=http://www.spoj.com/problems/MICEMAZE/&sa=D&source=hangouts&ust=1558433218696000&usg=AFQjCNHxxM-sa5iwK0S02Jvi93GghKEqMQ)  
  
5. [http://www.spoj.com/problems/SHPATH/](https://www.google.com/url?q=http://www.spoj.com/problems/SHPATH/&sa=D&source=hangouts&ust=1558433218696000&usg=AFQjCNEoYpQPz_cnJ1P_XzKLojrPcUTtNw)  
  
6. [http://www.spoj.com/problems/HIGHWAYS/](https://www.google.com/url?q=http://www.spoj.com/problems/HIGHWAYS/&sa=D&source=hangouts&ust=1558433218696000&usg=AFQjCNHVKuiCWFLnSG3HayCBmw-LcDH_SQ)  
  
7. [https://www.codechef.com/problems/HOMDEL](https://www.google.com/url?q=https://www.codechef.com/problems/HOMDEL&sa=D&source=hangouts&ust=1558433218696000&usg=AFQjCNGzJO9OTlB-Ew6DZv1OTMsOVljM1g)  
  
8. [http://www.spoj.com/problems/BUGLIFE/](https://www.google.com/url?q=http://www.spoj.com/problems/BUGLIFE/&sa=D&source=hangouts&ust=1558433218696000&usg=AFQjCNHKhUUqPv-iQM4XA8Q4yLIMJ9Snpw)  
  
9. [http://www.spoj.com/problems/PPATH/](https://www.google.com/url?q=http://www.spoj.com/problems/PPATH/&sa=D&source=hangouts&ust=1558433218697000&usg=AFQjCNEeiwdLFW4wy6DuR3dMUw0Yp44QvA)