AMAZON -

1. 20 MCQs - OS, DS ALGO, DBMS, APTI (Indiabix for quant) (20 mins)
2. Coding Questions (70 mins)

- Print Size of the maximum and minimum sized connected component in a graph.
- https://www.hackerrank.com/challenges/greedy-florist
- Given number n and an array of non decreasing n integers representing the size of memory partitions. Given a file size , Get the memory partition size that best fits the given file.
  Ex: n=8
  array=2 2 5 6 9 12 13 15
  File size=7
  Ans=9;
- Enter numbers in a n*n square matrix A starting from 1 to n*n(n-square) in spiral order. Right => down => left => up. Now given an integer k print locations (i,j) such that A[i][j]%k=0.printing should be done in increasing order of A[i][j] values
  Similar question : http://www.spoj.com/problems/PRINTSPIRAL/
- Remove nodes with odd value in linked list
- Return the most frequent string in reverse lexicographical order from an array of strings.
- You are given an array of N integers and K. You need to print the sum of integers in window of size K, starting it from [0,k-1] and sliding the window by one element.
- Magic strings, A string can consist only of characters{a,e,i,o,u} with the condition that ;.

  Condition 1: ‘a’ can only be followed by ‘e’
  Condition 2: ‘e’ can only be followed by ‘i’ or ‘o’
  Condition 3:’i’ can only be followed by ‘a’,’e’,’o’,or ’u’
  Condition 4: ‘o’ can only be followed by ‘i’ or ‘u’
  Condition 5: ‘u’ can only be followed by ‘a’
  Input : N length of string????, Output : number of such strings possible.
  Will generating all possible strings work??
  Is the answer 5*pow(2,n-1) ?
  My approach: make a dp of 5 x n. Dp[i][j] will denote j length strings ending with cha7[racter v[i]; v = {a,e,i,o,u}. Eg: Dp[‘a’][j] = Dp[‘i’][j-1] + Dp[‘u’][j-1] ; Is this correct? yes.:)
  http://www.geeksforgeeks.org/count-number-binary-strings-without-consecutive-1s/ (similar approach)

  Nope. Solve using dp :) O(n)
  We can solve this in O(5*n). Just write a recursive function with parameters i(position) and last characters. Based on last character, add the possibilities and solve for the sub problem. O(5*n).

1) Can you please clarify the question?All are standard questions, what is there to clarify ? Most online solutions are finding longest palindromic substring in single string. This one asks for two strings?

2) Given diagonally opposite points of two rectangles, find whether they overlap or not. k same ? No nothing
3) http://www.geeksforgeeks.org/clone-linked-list-next-arbit-pointer-set-2
4) http://www.geeksforgeeks.org/given-a-sequence-of-words-print-all-anagrams-together-set-2/
5) http://www.geeksforgeeks.org/minimum-cost-make-two-strings-identical/

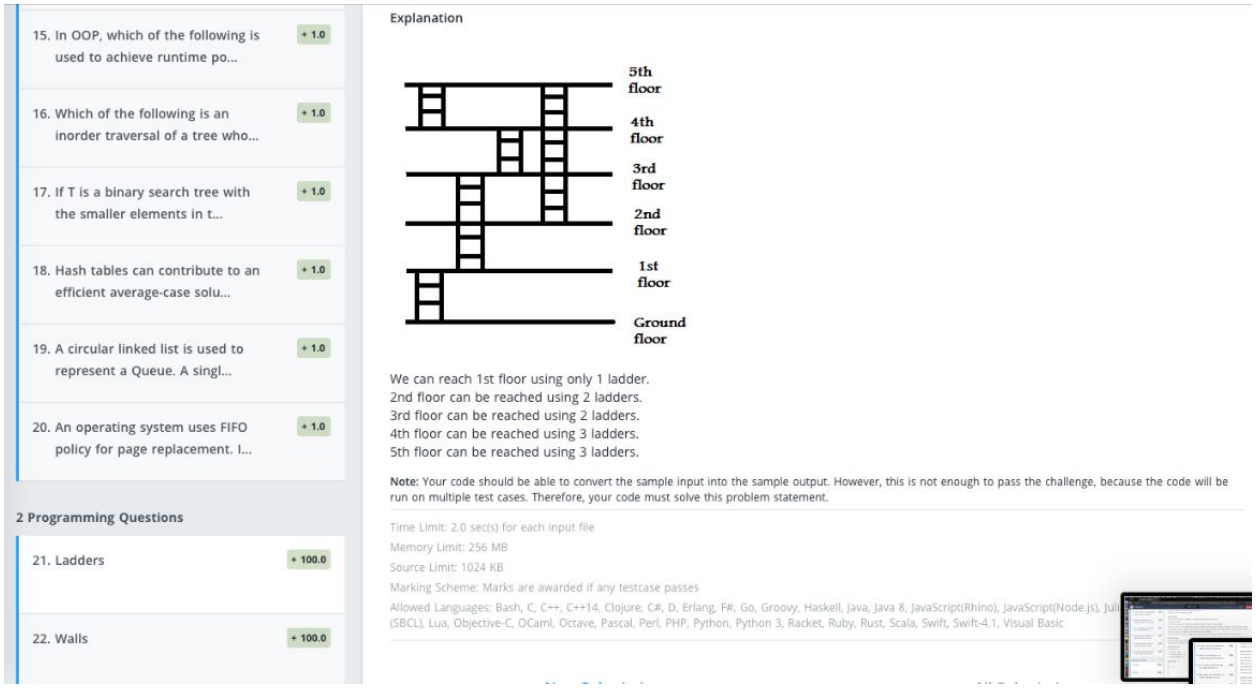
http://www.geeksforgeeks.org/lexicographic-rank-of-a-string/

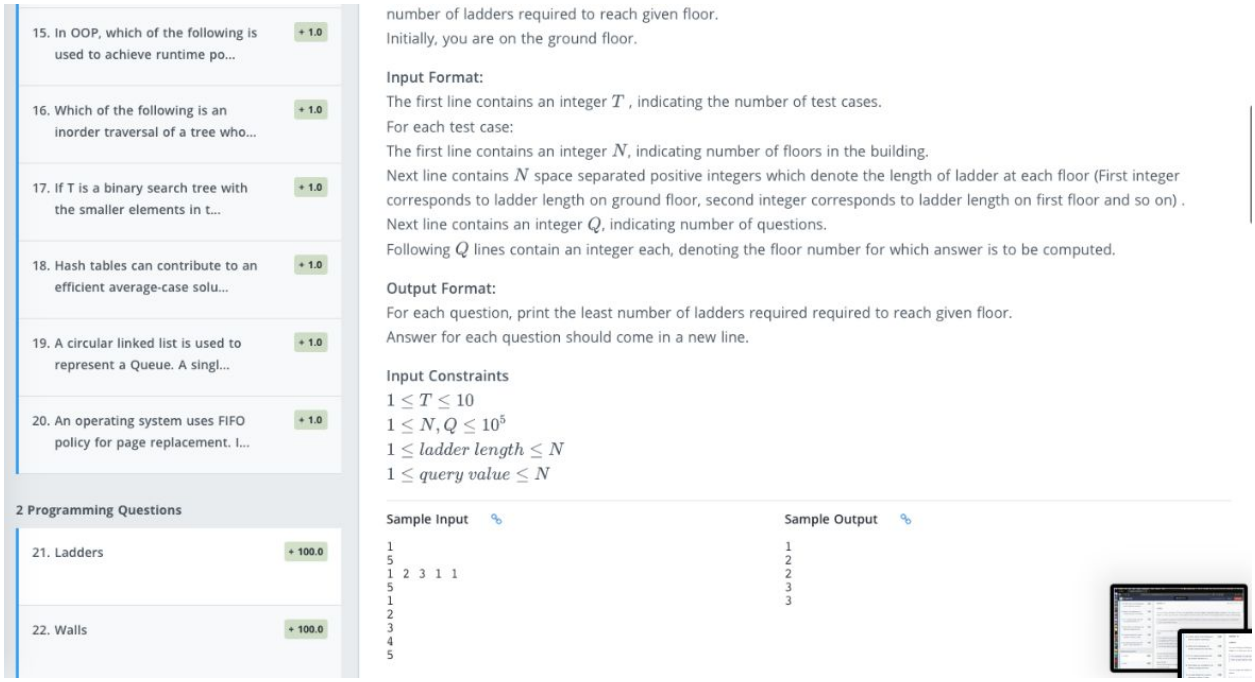
http://www.geeksforgeeks.org/josephus-problem-set-1-a-on-solution/

http://www.geeksforgeeks.org/reverse-words-in-a-given-string/

http://www.practice.geeksforgeeks.org/problem-page.php?pid=384

1. **Return row,col in a spiral matrix of size n*n of elements divisible by k**
2. **Simple binary search problem**
3. Given random array, find two elements with sum closest to zero. If multiple elements, find the one which has lowest minimum value. http://www.geeksforgeeks.org/two-elements-whose-sum-is-closest-to-zero/
4. Given a 2D matrix, find the Kth element in spiral order.





https://www.geeksforgeeks.org/minimum-number-platforms-required-railwaybus-station/ (Same question - 100 marks)

https://www.geeksforgeeks.org/count-integral-points-inside-a-triangle/ (For a polygon instead of a triangle - 100 marks)

20 MCQ (5 marks each) - OOPS(4-5), Networks(5-6), OS(3-4), Data Structures (5), Algorithms (2-3)

String Parsing Question. (URLiffy)
2. Infix to Postfix
3. Postfix Evaluate
4. Alien Dictionary
5. Sort numbers when rank of each number in decimal system is changed.(Could anyone please elaborate the question or give some link of this question on some website) as per my understanding when each number is mapped to another number for eg. 1 has rank 4, 2 has 9, etc and then you have to sort the modified number system.
6. Inversions in array.
7. Longest Common Subsequence.
8. Longest increasing Subsequence What order solution passed +1 Same Doubt
9. https://www.geeksforgeeks.org/dice-throw-dp-30/
10. Longest decreasing subsequence.
11. MEAN, MEDIAN, MODE OF AN ARRAY .
12 You are given a String S made of lowercase English Alphabets. Find the length of smallest substring with maximum number of distinct characters.
1<= |S| <= 10^5, where |S| denotes the length of the String.

https://www.geeksforgeeks.org/length-smallest-sub-string-consisting-maximum-distinct-characters/

13. https://www.geeksforgeeks.org/count-possible-decodings-given-digit-sequence/
14. Replace every element with the smallest element on the right side
15 Right, Left, Top, Bottom view of the tree.
please mention the platform ?

String Parsing Question. (URLiffy)

2. Infix to Postfix

3. Postfix Evaluate

Infix evaluation (using 2 stacks)

4. Alien Dictionary

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2 questions from this list: Amazon Online Assessment Questions list

https://www.geeksforgeeks.org/merge-two-sorted-linked-lists/

https://www.geeksforgeeks.org/a-linked-list-with-next-and-arbit-pointer/

Favorite Genre (https://leetcode.com/discuss/interview-question/373006)

Merge two sorted lists

Search for a Tree in another tree

Critical Connections (leetcode DFS) (Being asked a lot)

count distinct pairs with a target sum

https://www.geeksforgeeks.org/merge-two-sorted-linked-lists/

Q2) https://www.geeksforgeeks.org/clone-linked-list-next-arbit-pointer-set-2/

Q3) https://www.geeksforgeeks.org/search-in-row-wise-and-column-wise-sorted-matrix/

(Brute force was passing all the test cases)

Q4) https://leetcode.com/problems/two-sum/

Q5) https://leetcode.com/problems//

All Debugging questions from this list Only (This link Contains Some Chinese Language Also Translate it to English)

https://www.evernote.com/client/snv?noteGuid=d0047552-4cff-4c29-b305-b8aa2d33f364&noteKey=636f07d57c2eb3ea&var=b&sn=https%3A%2F%2Fwww.evernote.com%2Fshard%2Fs683%2Fsh%2Fd0047552-4cff-4c29-b305-b8aa2d33f364%2F636f07d57c2eb3ea&exp=ENB3907&title=Amazon%2BOA1%2BDebugging

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https://imgur.com/a/BQ3jDAg