1.They asked about all the details of the project, they asked me every possible question they could about my projects.  
  
2.What is ML? Explain Naive bayes. Explain KNN algo. What are SVM?Difference between AI , ML and Deep Learning. It was kind of a rapid fire round where they kept on asking me questions and I kept on answering them.

3.Why I choose C++ and jsp ,html ,mysql as my main programming language. In project

4. <http://www.geeksforgeeks.org/compiling-a-c-program-behind-the-scenes>

5.How you search an Element in BST.

6.Example Of HashMAP.

7..Sort string Array without using inbuilt function(Hint : Use CompareTo() Method in comparison And Override sort function with your Own Code).

8.Given a sorted array and a number x, find the pair in array whose sum is closest to x.

9.Reverse A linklist without using Extra Data Structure.

10.Merge Two ursorted list in sorted single linklist.

11. Delete node from bst

12. worst case scenario in bst

13.Delete key from linked list

14. Dynamically allocate 2d array

15.Write a program to find when we get stack overflow if we are using recursive functions.

16.Mr. Kim has to deliver refrigerators to N customers. From the office, he is going to visit all the customers and then return to his home. Each location of the office, his home, and the customers is given in the form of integer coordinates (x,y) (-1<x<101, -1<y<101) . The distance between two arbitrary locations (x1, y1) and (x2, y2) is computed by |x1-x2| + |y1-y2|, where |x| denotes the absolute value of x; for instance, |3|=|-3|=3. The locations of the office, his home, and the customers are all distinct. You should plan an optimal way to visit all the N customers and return to his among all the possibilities.

You are given the locations of the office, Mr. Kim’s home, and the customers; the number of the customers is in the range of 5 to 10. Write a program that, starting at the office, finds a (the) shortest path visiting all the customers and returning to his home. Your program only have to report the distance of a (the) shortest path.

You don’t have to solve this problem efficiently. You could find an answer by looking up all the possible ways. If you can look up all the possibilities well, you will get a perfect score.

**[Constraints]**

4<N<11. Each location (x,y) is in a bounded grid, -1<x<101, -1<y<101, and x, y are integers.

**[Input]**

You are given 10 test cases. Each test case consists of two lines; the first line has N, the number of the customers, and the following line enumerates the locations of the office, Mr. Kim’s home, and the customers in sequence. Each location consists of the coordinates (x,y), which is reprensented by ‘x y’.

**[Output]**

Output the 10 answers in 10 lines. Each line outputs the distance of a (the) shortest path. Each line looks like ‘#x answer’ where x is the index of a test case. ‘#x’ and ‘answer’ are separated by

a space.  
  
[I/O Example]  
Input (20 lines in total. In the first test case, the locations of the office and the home are (0, 0) and (100, 100) respectively, and the locations of the customers are (70, 40), (30, 10), (10, 5), (90, 70), (50, 20).)  
  
5 (Starting test case #1)  
0 0 100 100 70 40 30 10 10 5 90 70 50 20  
  
6 (Starting test case #2)  
88 81 85 80 19 22 31 15 27 29 30 10 20 26 5 14  
  
Output (10 lines in total)  
#1 200  
#2 304  
  
HINT:- Use BackTracking  
Tips:- Practice questions on DFS, BFS, Backtracking

16.<http://www.geeksforgeeks.org/rearrange-a-given-linked-list-in-place/>

17.Given an array of integers, print pairs(positive value and negative value of the number) that exists in the array.

18.<http://www.geeksforgeeks.org/kth-smallest-element-in-a-row-wise-and-column-wise-sorted-2d-array-set-1/>

19.http://www.geeksforgeeks.org/sliding-window-maximum-maximum-of-all-subarrays-of-size-k/  
  
20.Given a string. Find all the palindromic partitions of the string.

21.You are given with a large paragraph and N words.You have to find a min length subparagraph of the paragraph which contain all those N words in any order.

22.<http://www.geeksforgeeks.org/trapping-rain-water/>

23.Given a positive number and you have to find all the no. that holds the property of all the digits with absolute difference equal to 1 to its adjacent digit below that given number.

24.How to multiply and divide a number by 2 without using \* and / respectively?

Given a decimal number, count the number of set bits (bits equal to 1) in its binary representation.Ans. This was my approach from a simple solution to an efficient one.Naïve way: Method 1 of the link given below.

Efficient way: Method 2 of the link given below.<http://www.geeksforgeeks.org/count-set-bits-in-an-integer/>

25. Find maximum of minimum for every window size k in a given array.

26.Design a Data Structure that will support AddElement(),DeleteElement() and getRandomElement() functions in O(1) time complexity.

27.Candies Distribution Problem

28.Suppose we are given n elements and m pairs (a,b) where each pair denotes that height of elephant a is less than height of elephant b. We need to determine one of the possible orders of the elephants height and output it in the form (for example) a < b < c.

Here I wrote one of the possible orders because if the number of given pairs are less than the required number of pairs to determine the actual order then we need to print all possible orders of elephants heights.

29.[Find maximum possible stolen value from houses](http://www.geeksforgeeks.org/find-maximum-possible-stolen-value-houses/)

30.[0-1 Knapsack Problem](http://www.geeksforgeeks.org/knapsack-problem/)

31.

They asked me this question by twisting the language by taking IPL example where each player has some rating and cost. We need to maximize rating given fixed budget.

Then they asked me since for basic DP approach we need to make a 2-D matrix in which number of columns is equal to the budget that we have. So this basic DP approach takes lots on unnecessary space. Imagine the case where budget = 500 then we need to make 500 columns in our matrix. So they asked for some better approach.I gave them my approach at that time I don’t know whether it was correct or not because interviewer just listened to my approach and had not said anything and ended the interview.

32.Given a reference (pointer to pointer) to the head of a list and a key, delete the node from the linked list. <http://www.geeksforgeeks.org/linked-list-set-3-deleting-node/>