1. Given a matrix consisting of 0's and 1's, find the maximum size sub-matrix consisting of only 1's. (Done)
   0 1 1 0 1
   1 1 0 1 0
   0 1 1 1 0
   1 1 1 1 0
   1 1 1 1 1
   0 0 0 0 0
   http://www.geeksforgeeks.org/maximum-size-sub-matrix-with-all-1s-in-a-binary-matrix/
2. Given an array containing both positive and negative integers, find the contiguous array with the maximum sum.
   `int a[] = {-2, -3, 4, -1, -2, 1, 5, -3}; ans: 7`
   http://www.geeksforgeeks.org/largest-sum-contiguous-subarray/

3. **Longest Increasing Subsequence** - Find the length of the longest subsequence of a given sequence such that all the elements are sorted in increasing/non-decreasing order.
   Ex: {3,4,**-1**,**0**,6,**2**,**3**}. (Done)
   http://www.geeksforgeeks.org/dynamic-programming-set-3-longest-increasing-subsequence/

4. There are many problems which reduce to the this problem such as box stacking and the building bridges. These days the interviewers expect an NLogN solution.

5. Edit Distance - Given two strings and a set of operations Change (C), insert (I) and delete (D) , find minimum number of edits (operations) required to transform one string into another. (Done)
   String str1 = "sunday";
   String str2 = "saturday";
   http://www.geeksforgeeks.org/dynamic-programming-set-5-edit-distance/

6. 0/1 Knapsack Problem - A thief robbing a store and can carry a maximal weight of *W* into their knapsack. There are n items and *ith* item weight *wi* and is worth *vi* dollars. What items should thief take?
   int val[] = {60, 100, 120};
   int wt[] = {10, 20, 30};
   int W = 50;
   Int val[] = {1, 4, 5, 7}
   Int wt[] = {1, 3, 4, 5}
   Int Weight = 7

7. Balanced Partition - You have a set of n integers each in the range 0 … K. Partition these integers into two subsets such that you mini.
8. Word break.

9. Given a string, generate all palindromic subsequences.

10. mize |S1 – S2|, where S1 and S2 denote the sums of the elements in each of the two subsets.

11. Coin Change - Given a value N, if we want to make change for N cents, and we have infinite supply of each of S = { S1, S2, .. , Sm} valued coins, how many ways can we make the change?
http://www.geeksforgeeks.org/dynamic-programming-set-7-coin-change/

11.1 Find minimum number of coins that make a given value (Done)
http://www.geeksforgeeks.org/find-minimum-number-of-coins-that-make-a-change/

12. Longest Common Subsequence - Find the longest common subsequence of two strings A and B where the elements are letters from the two strings and they should be in the same order. (Done)
LCS for input Sequences “ABCDGH” and “AEDFHR” is “ADH” of length 3.
LCS for input Sequences “AGGTAB” and “GXTXAYB” is “GTAB” of length 4.
Startups
13. Longest Common Substring (Done)
LCS for input Sequences “ABCDGH” and “AGGTAB” is “AB” of length 2.

14. Longest Palindromic Subsequence - The question is same as above but the subsequence should be palindromic as well.
char seq[] = "GEEKSFORGEEKS"; (Done)

14. Longest Palindromic Substring - The question is same as above but the Substring should be palindromic as well.g (Done)
char seq[] = "BANANA";

16. Minimum Number of Jumps - Given an array of integers where each element represents the maximum number of steps that can be made forward from that element, find the minimum number of jumps to reach the end of the array (starting from the first element).
Input: arr[] = {1, 3, 5, 8, 9, 2, 6, 7, 6, 8, 9}
Output: 3 (1-> 3 -> 8 ->9)
http://www.geeksforgeeks.org/minimum-number-of-jumps-to-reach-end-of-a-given-array/
(O(n^2) Solution)
https://www.youtube.com/watch?v=vBdo7wtwlXs&list=PLamzFoFxwoNjtJZoNNAlYQ_Ixmm2s-CGX&index=11 (O(n) Solution)

17. Max output using Ctrl-A, Ctrl-C, Ctrl-V (Done)
18. Number of possible encoded string where {1=a, 2=b,3=c…26=z} (Done)
https://youtu.be/aCKyFYF9_Bg?list=PLamzFoFxwoNigGUa4TRpRk-2SNaGhmypH

19.http://www.geeksforgeeks.org/count-ways-reach-nth-stair/

20. http://www.geeksforgeeks.org/maximum-sum-such-that-no-two-elements-are-adjacent/
3 2 7 10 should return 13 (sum of 3 and 10) or 3 2 5 10 7 should return 15 (sum of 3, 5 and 7) (Done)
21. http://www.geeksforgeeks.org/dynamic-programming-set-13-cutting-a-rod/ (Done)

22. http://www.geeksforgeeks.org/given-matrix-o-x-find-largest-subsquare-surrounded-x/
Youtube:https://www.youtube.com/watch?v=vi_1eHCsR9A&index=40&list=PLrmLmBdmIlpsHaNTPP_jHHDx_os9ItYXr

23. Fibonacci (Done)
http://www.geeksforgeeks.org/program-for-nth-fibonacci-number/

24. Power of x to n (Done)
http://www.geeksforgeeks.org/write-a-c-program-to-calculate-powxn/

25. SubsetSum:
Youtube:
https://www.youtube.com/watch?v=s6FhG--P7z0&index=4&list=PLrmLmBdmIlpsHaNTPP_jHHDx_os9ItYXr
Code:https://github.com/mission-peace/interview/blob/master/src/com/interview/dynamic/SubsetSum.java

GeeksForGeeks:http://www.geeksforgeeks.org/dynamic-programming-subset-sum-problem/

26. http://www.ideserve.co.in/learn/next-greater-number-using-same-digits

27. http://www.geeksforgeeks.org/count-number-binary-strings-without-consecutive-1s/
Youtube:https://www.youtube.com/watch?v=Bq9lggC1YwE&list=PLamzFoFxwoNjtJZoNNAlYQ_lxmm2s-CGX&index=8

28. Gold mine problem

Apart from above questions try to go through all the questions in below link, it will cover most of the Algorithm and usage of DS.

These questions are mandatory before you start to solve others questions.
http://www.geeksforgeeks.org/fundamentals-of-algorithms/#DynamicProgramming

1. Boolean Parenthesization Problem
2. Shortest Common Supersequence
3. Matrix Chain Multiplication
4. Partition problem
5. Optimal Strategy for a Game
6. Ways to Cover a Distance
7. Word Break Problem
8. Maximal Product when Cutting Rope
9. Dice Throw Problem
10. Box Stacking
11. Egg Dropping Puzzle
12. Minimum Partition