	These are the questions which i did during my preparation.		
	DSA SHEET by NISHANT CHAHAR		
	Question Link	**DONE**	**HINT**
	Stacks		
1	Next Greater Element on right		
2	Next Greater Element 2		
3	Daily Temperatures		
4	maximum difference between left and right smaller		
5	Stock Span Problem		
6	Largest Rectangular Area Histogram		
7	maximu size binary matrix containing 1		
8	Valid Parentheses		
9	Length of longest valid substring		
10	Count of duplicate Parentheses		
11	Decode String		
12	Minimum Add To make Parentheses Valid		
13	Print Bracket Number		
14	Asteroid Collision		
15	Backspace String Compare		
16	Print Binary Number		
17	Score Of String		
18	Remove K digits From number		
19	Car fleet		
20	First negative Integer in k sized window		
21	Addition		
22	Gas Station		
23	Maximum sum of smallest and second smallest		
24	Min Stack		
25	K stacks in a single array		
26	Validate Stack		
27	K reverse in a queue		
28	largest Pair sum in unsorted array		
	Linked Lists		
1	reverse LinkedList		
2	K reverse		
3	Floyd cycle		
4	Merge LinkedList		

5	Clone a linkedlist		
6	find modular node		
7	Remove duplicate from sorted		
8	Find the middle element		
9	Nth element from end		
10	LRU Cache		
	Binary Tree		
1	Inorder Traversal		
2	Preorder Traversal		
3	Postorder Traversal		
4	Print ancestor of given tree		
5	Binary Tree Level Order		
6	Average of levels		
7	All Nodes at distance K		
8	Count bst in a given range		
9	Binary search tree to greater sum		
10	Binary Tree Cameras		
11	Binary Tree Maximum Path Sum		
12	Binary Tree to BST		
13	right side view		
14	Left View		
15	Vertical order		
16	Top View		
17	Bottom View		
18	Diagonal Traversal		
19	leftmost and rightmost node		
20	kth smallest element		
21	Binary Tree Tilt		
22	Print all nodes that dont have siblings		
23	House robber 3		
24	Boundary Traversal		
	Binary search tree		
1	Lowest common ancestor in BST		
2	Lowest common ancestor		
3	square root decomposition		
4	Delete Node in BST		
5	Construct from inorder and preorder		

6	Construct from inorder and postorder		
7	construct bst using postorder		
8	Inorder and level order		
9	serialize and deserialise		
10	Distribute coins in a binary tree		
11	duplicate subtree in a binary tree		
	Mixed from tree (General tree, AVL,BST)		
1	AVL tree		
2	image multiplication		
3	Binary TREE longest consecutive sequence		
4	diameter of a tree		
5	Kth smallest element of BST		
6	clone a binary tree with random pointer		
7	Flatten binary tree to linked list		
8	Convert a binary tree to circular doubly linked list		
9	Conversion of sorted DLL to BST		
10	Merge Two BST		
11	Pair violating BST property		
12	Flip binary tree to match preorder		
13	inorder succesor		
14	Rabbits in forest		
	Arrays & strings (STL)		
1	Array of doubled Pair		
2	Find smallest size of string containing all char of other		
3	Longest consecutive 1's		
4	number of subarrays sum exactly k		
5	Subarray sum Divisible by k		
6	longest substring with unique character		
7	subarray with equal number of 0 and 1		
8	Substring with equal 0 1 and 2		
9	same frequency after one removal		
10	K closest point from origin		
11	Anagram Pallindrome		
12	Minimum number of refueling spots		
13	Find all anagrams in a string		
14	K anagram		
15	smallest number whose digit mult to given no.		
16	Group anagram		

17	Huffman coding		
18	Isomorphic string		
19	Check AP sequence		
20	Count Pair whose sum is divisible by k		
21	smallest subarray with all the occurence of MFE		
22	Morning Assembly		
23	Kth smallest element in sorted 2d matrix		
24	Kth smallest prime fraction		
25	Max points on a line		
26	Brick wall		
27	Array Pair sum divisibility		
28	A simple fraction		
29	Grid illumination		
30	Insert Delete GetRandom O(1)		
31	Count of substring with k 1		
32	Incomplete array		
33	Long Pressed Name		
34	Range Addition		
35	Max range query		
36	Magic Squares In Grid		
37	Next Greater Element III		
38	Orderly Queue		
39	maximum subarray		
40	K-CON		
41	Rotate Array		
42	Remove Duplicates from Sorted Array		
43	X of akind in a deck		
44	merge k sorted array		
45	Grid illumination		
46	Kth smallest after removing natural numbers		
47	rearrange character string such that no two are same		
48	Longest consecutive sequence		
49	length of largest subarray with continuous element		
50	length of largest subarray with cont element 2		
51	Anagram mapping		
52	Employee Free time		
53	Line reflection		
	Heap		

1	Binary heap		
2	Build heap from array		
3	Island perimeter		
4	skyline problem		
5	Pairs of coinciding points		
6	trapping rain water		
7	Trapping Rain Water II		
8	Sort a nearly sorted array		
9	bulb switcher		
10	max frequency stack		
11	Sliding window maximum		
12	Swim in rising water		
13	Heap sort		
14	Product of Array Except Self		
15	K empty slots		
16			
17	**mathematics**		
18			
19	Sieve of Eratosthenes		
20	Segmented sieve		
21	Squares of a Sorted Array		
22	Fast Exponentiation		
23	Fibonacci Number		
24	Container With Most Water		
	Searching & Sorting		
1	Segregate 0 and 1		
2	Segregate 0-1-2		
3	Sort Array By Parity		
4	MIn Jump required with +i or -i allowed		
5	Max chunks to make sorted		
6	Max Chunks To Make Sorted II		
7	Two Sum		
8	Two Difference		
9	LPS		
10	Shortest Palindrome		
11	Boats to Save People		

12	Min No. of Platform		
13	Maximum Swap		
14	Optimal Division		
15	Max Consecutive Ones II		
16	max consecutive ones 3		
17	majority element		
18	majority element 2		
19	majority element general		
20	Reverse vowels of a string		
21	First missing positive		
22	push dominoes		
23	moving stones until consecutive 2		
24	max product of 3 numbers		
25	largest number atleast twice of others		
26	maximum product subarray		
27	rotate image		
28	number of subarrays with bounded maximum		
29	partition labels		
30	global and local inversions		
31	partition array into disjoint intervals		
32	valid pallindrome 2		
33	consecutive number sum		
34	minimum domino rotation for equal row		
35	multiply strings		
36	smallest range from k lists		
37	pascal triangle 2		
38	max sum of two non overlapping subarrays		
39	maximize distance to closest person		
40	Subarrays with k different integers		
41	Icing on cake		
42	search in rotated sorted array		
43	split array largest sum		
44	counting sort		
45	capacity to ship within D days		
46	insertion sort		
47	koko eating bananas		
48	median of two sorted array		
49	merge sort		
50	smallest divisor given a threshold		

51	wiggle sort		
52	best meeting points		
	Graph		
1	BFS of graph		
2	Bipartite graph		
3	DFS		
4	detect cycle in undirected graph		
5	Prim's Algo		
6	Dijkstra algo		
7	chef and reversing		
8	Bus routes		
9	evaluate division		
10	topological sorting		
11	Kahn's algo		
12	course schedule 2		
13	Strongly Connected Components (Kosaraju's Algo)		
14	Mother Vertex		
15	Rotting Oranges		
16	bellman ford		
17	Number of Islands		
18	DSU		
19	Number of Enclaves		
20	Most Stones Removed with Same Row or Column		
21	Regions Cut By Slashes		
22	Kruskal's algo		
23	Articulation point		
24	Doctor Strange		
25	Satisfiability of Equality Equations		
26	0-1 matrix		
27	Word Ladder		
28	Job Sequencing		
29	Eulerian Path in an Undirected Graph		
30	Euler Circuit in a Directed Graph		
31	Castle RUN		
32	Sentence Similarity II		
33	Number of Distinct Islands		
34	Number of Islands II		
35	Parallel courses		

36	optimize water distribution in village		
37	connecting cities with minimum cost		
	Dynamic programming		
1	Minimize Malware Spread		
2	climbing stairs		
3	Jump game 2		
4	Min cost path		
5	max size subsquare with all 1		
6	0-1 Knapsack		
7	fractional knapsack		
8	longest increasing subsequence		
9	longest increasing subsequence		
10	minimum number of increasing subsequence		
11	building bridges		
12	Box stacking		
13	max sum alternating subsequence		
14	best time to buy and sell stock		
15	best time to buy and sell 2		
16	best time to buy and sell 3		
17	best time to buy and sell 4		
18	best time to buy and sell with cool down		
19	buy and sell with transaction time		
20	Ugly number		
21	Super ugly number		
22	Domino and tromino tilling		
23	Wildcard pattern matching		
24	Regular expression matching		
25	Count all pallindromic subsequences		
26	Regular expression matching		
27	Count all pallindromic subsequence		
28	Count distinct pallindromic subsequence		
29	Count of binary string without consecutive 1		
30	Max sum with no 2 adjacent element		
31	Pizza with 3n slices		
32	LCS triplet		
34	Edit distance		
35	Frog jump		

36	Friends pairing problem		
37	Partition of sets into k subsets		
38	Can i win		
39	Knight probability		
40	Temple offering		
41	Highway billboard problem		
42	No. of sequence of type a^i+b^j+c^k		
43	boolean parenthesization		
44	Min and max with + and *		
45	Optimal BST		
46	Find water in glass		
47	cherry pickup		
48	arithmetic slices		
49	arithmetic slices 2		
50	Largest sum subarray atleast k numbers		
51	Maximum sum of 3 non overlapping subarrays		
52	Remove min element according to constraint		
53	Scramble string		
54	Minimum score triangulation		
55	2 keys keyboard		
56	4 keys keyboard		
57	Mobile numeric keypad		
58	Word break		
59	burst balloons		
60	Encode string with shortest length		
61	longest repeating subsequence		
62	String is k pallindromic or not		
63	Count distinct subsequence		
64	Shortest uncommon subsequence		
65	minimal moves to form a string		
66	Paint fence		
67	Paint house		
68	Paint house 2		
	BFS/DFS		
	Sliding Puzzle		
1	Find the Maximum Flow		
2	Maximum Bipartite Matching		
3	Reconstruct Itinerary		
4	Redundant Connection		
5	Redundant connection 2		

6	Possible Bipartition		
7	Floyd Warshall		
8	Johnson's algorithm		
9	Journey to the moon		
10	Sort item by group accord to dependencies		
11	As far from land as possible		
11	K-Similar Strings		
12	Similar String Groups		
13	Coloring A Border		
14	Shortest bridge		
15	Min swaps required to sort array		
16	Walls and gates		
17	The maze 2		
	Text processing		
1	KMP		
2	Find string roots		
3	Z algo		
4	chef and secret password		
5	Manacher's algo		
	Number theory		
1	Euclidean algorithm		
2	Extended Euclidean algorithm		
3	Linear diaophantine equation		
4	Euler's totient function		
5	Divisors upto n		
6	Fermat's little theorem		
7	No min No max		
8	Boring factorials		
9	FFT		
	Geometry		
1	Erect the fence		
	Game Theory		
1	5 Pirates and 100 coins		
2	Nim game		
3	Buddy nim		