Input Length	Worst Accepted Time Complexity	Usually type of solutions
10 -12	O(N!)	Recursion and backtracking
15-18	O(2 <sup>N</sup> * N)	Recursion, backtracking, and bit manipulation
18-22	O(2 <sup>N</sup> * N)	Recursion, backtracking, and bit manipulation
30-40	O(2 <sup>N/2</sup> * N)	Meet in the middle, Divide and Conquer
100	O(N <sup>4</sup> )	Dynamic programming, Constructive
400	O(N <sup>3</sup> )	Dynamic programming, Constructive
2K	O(N <sup>2*</sup> log N)	Dynamic programming, <u>Binary</u> <u>Search, Sorting</u> , Divide and Conquer
10K	$O(N^2)$	Dynamic programming, <u>Graph</u> , <u>Trees</u> , Constructive
1M	O(N* log N)	Sorting, Binary Search, Divide and Conquer
100M	O(N), O(log N), O(1)	Constructive, Mathematical, Greedy Algorithms