Algorithm	Time Complexity (Best)	Time Complexity (Worst)	Time Complexity (Average)	Space Complexity
Sorting Algorithms				
Bubble Sort	O(n)	O(n^2)	O(n^2)	O(1)
Selection Sort	O(n^2)	O(n^2)	O(n^2)	O(1)
Insertion Sort	O(n)	O(n^2)	O(n^2)	O(1)
Merge Sort	O(n log n)	O(n log n)	O(n log n)	O(n)
Quick Sort	O(n log n)	O(n^2)	O(n log n)	O(log n)
Heap Sort	O(n log n)	O(n log n)	O(n log n)	O(1)
Counting Sort	O(n+k)	O(n+k)	O(n+k)	O(k)
Radix Sort	O(nk)	O(nk)	O(nk)	O(n+k)
Bucket Sort	O(n+k)	O(n^2)	O(n)	O(n+k)
Greedy Algorithms				
Dijkstra's Algorithm	O(	V	^2)	O(
Kruskal's Algorithm	O(E log E)	O(E log E)	O(E log E)	O(E)
Prim's Algorithm	O(	V	^2)	O(
Huffman Coding	O(n log n)	O(n log n)	O(n log n)	O(n)
Dynamic Programming				
Fibonacci Sequence	O(n)	O(2^n)	O(n)	O(n)
Longest Common Subsequence	O(m*n)	O(m*n)	O(m*n)	O(m*n)
Knapsack Problem	O(n*W)	O(n*W)	O(n*W)	O(n*W)
Backtracking				
N-Queens Problem	O(n!)	O(n!)	O(n!)	O(n)
Subset Sum	O(2^n)	O(2^n)	O(2^n)	O(n)
Sudoku Solver	O(9^(n*n))	O(9^(n*n))	O(9^(n*n))	O(n*n)
Branch and Bound				
Travelling Salesman Problem	O(n!)	O(n!)	O(n!)	O(n^2)
0/1 Knapsack Problem	O(2^n)	O(2^n)	O(2^n)	O(n)