Dynamic Programming Sheet

~Curated by Ashish

(Suggested Read: Optimal Substructures,Overlapping Sub Problems Tabulation/Memoization)

1-D DP (Basics)

Problem	Difficulty	Done(Y/N)
Fibonacci Series Problem	Easy	N
Climbing Stairs Problem	Easy	N
Friends Pairing Problem	Easy	N
Catalan Number Problem	Medium	N
House Robber	Medium	N

(*1-D Problems will help you understand how to make recurrence relations and then you can use a DP approach to solve it*)

2-D DP and more

Problem	Difficulty	Done(Y/N)
0-1 Knapsack	Medium	N
Subset Sum Problem	Medium	N
Coin Change GFG	Medium	N

Coin Change LeetCode	Medium	N
Edit Distance	Medium-H	N
Minimum Coins	Easy	N
Rod Cutting	E-Medium	N
Minimum Insertion/Deletion	Easy	N
Partition Equal Subset Sum	Medium	N
Maximum path sum in Matrix	Medium	N
Minimum path sum	Medium	N
Dice Throw	Medium	N
Unique Paths	Medium	N
Minimum Sum Partition	Hard	N
Minimum Jumps	Medium	N
Target Sum	Medium	N
Triangle	Medium	N
Longest Common Subsequence (LCS)	Medium	N
Longest Increasing Subsequence (LIS)	Medium	N
Count Subsequences	Medium	N
Maximum Sum Increasing Subsequence	Medium	N
Longest Palindromic	Medium	N

Subsequence		
Unique Binary Trees	Medium	N
Longest Common Substring	Medium	N
Dropping Egg (Famous Puzzle)	Hard	N
Box Stacking	Medium	N
Count Palindromic Subsequences	Medium	N
Shortest Common Supersequence	Medium	N
Buy and Sell Stocks	Easy	N
Buy and Sell Stocks GFG	Hard	N
Longest Bitonic Subsequence	Medium	N
Minimum Jumps	Medium	N
Wildcard Matching	Hard	N
Minimum Cost to Cut a Stick	Hard	N
Longest String Chain	Medium	N
Maximal Rectangle	Hard	N
Matrix Multiplication	Hard	N
Largest Divisible Subset	Medium	N
Count Square	Medium	N

Submatrices with all 1s		
Palindrome Partitioning	Hard	N
Burst Balloons	Hard	N
Form Palindrome	Medium	N
Boolean Paranthesization	Medium-H	N

Unsolved	Remarks