

DYNAMIC PROGRAMMING

Overlapping **Subproblems** Property,

Optimal **Substructure** Property,

1. Longest Increasing Subsequence **LIS**,
2. Longest Common Subsequence **LCS**,
3. Edit Distance,
4. Min Cost Path,
5. Coin Change,
6. Matrix Chain Multiplication,
7. Binomial Coefficient,
8. 0-1 Knapsack Problem,
9. Egg Dropping Puzzle,
10. **Longest Palindromic Subsequence**,
11. Cutting a Rod,
12. Maximum Sum Increasing Subsequence,
13. Longest Bitonic Subsequence,
14. Floyd Warshall Algorithm,
15. **Palindrome Partitioning**,
16. Partition problem,
17. Word Wrap Problem,
18. Maximum Length Chain of Pairs,

19. Variations of **LIS**,
20. Box Stacking Problem,
21. Program for Fibonacci numbers,
22. Minimum number of jumps to reach end,
23. Maximum size square sub-matrix with all 1s,
24. Ugly Numbers,
25. **Largest Sum Contiguous Subarray**,
26. **Longest Palindromic Substring**,
27. Bellman–Ford Algorithm for Shortest Paths,
28. Optimal Binary Search Tree,
29. **Largest Independent Set Problem**,
30. Subset Sum Problem,
31. Maximum sum rectangle in a 2D matrix,
32. Count number of binary strings without consecutive 1s?
33. Boolean Parenthesization Problem,
34. Count ways to reach the N^{th} stair,
35. Minimum Cost Polygon Triangulation,
36. **Mobile Numeric Keypad Problem**,