

RECURSION +BACKTRACKING

(7PATTERNS)

Pattern Category	Pattern Name	Example Problems
Subset / Include-Exclude	Subset Pattern	print All Subsequences/Power Set, Count Subsequences with Sum K, Check if Subsequence with Sum K, Subset Sum I, Subset Sum II
Combination	Combination Pattern (with start index)	Combination Sum, Combination Sum III
Combination + Constraints	Combination Pattern + Duplicate Skipping	Combination Sum II
Partitioning + Constraints	Partitioning + Constraint-Based Backtracking	Palindrome Partitioning
Grid-Based Backtracking	Grid DFS + Visited Tracking	Word Search, Rat in a Maze
Constraint-Based Backtracking	Constraint-Based Backtracking + Pruning	Generate Parentheses, N Queens, M Coloring Problem, Sudoku Solver
Recursion + Memoization	Recursion + Memoization (Top-Down DP)	Word Break