

## BACKTRACKING

1. [Backtracking | Set 1 \(The Knight's tour problem\)](#)
2. [Backtracking | Set 2 \(Rat in a Maze\)](#)
3. [Backtracking | Set 3 \(N Queen Problem\)](#)
4. [N Queen in O\(n\) space](#)
5. [Backtracking | Set 4 \(Subset Sum\)](#)
6. [Backtracking | Set 5 \(m Coloring Problem\)](#)
7. [Backtracking | Set 6 \(Hamiltonian Cycle\)](#)
8. [Backtracking | Set 7 \(Sudoku\)](#)
9. [Boggle | Set 2 \(Using Trie\)](#) (MICROSOFT)
10. [Remove Invalid Parentheses](#)
11. [Rat in a Maze with multiple steps or jump allowed](#)
12. [Write a program to print all permutations of a given string](#) (iski ekk or achi approach crack the coding interview book m diya h... dekh lena)
13. [Print all possible paths from top left to bottom right of a mXn matrix](#)
14. <https://www.geeksforgeeks.org/find-number-of-islands/> (COMPANY)
15. [Tug of War](#)
16. [Combinational Sum](#)
17. [Backtracking to find all subsets](#)
18. [Find all distinct subsets of a given set](#)
19. [Power Set in Lexicographic order](#)
20. [Word Break Problem using Backtracking](#)
21. [Count all possible paths between two vertices](#)
22. [Partition of a set into K subsets with equal sum](#)
23. [Longest Possible Route in a Matrix with Hurdles](#)
24. [Match a pattern and String without using regular expressions](#)
25. [Fill two instances of all numbers from 1 to n in a specific way](#)
26. [Find shortest safe route in a path with landmines](#)
27. [Find paths from corner cell to middle cell in maze](#)
28. [Find if there is a path of more than k length from a source](#)
29. [Find Maximum number possible by doing at-most K swaps](#)
30. [Print all palindromic partitions of a string](#)
31. [Print all paths from a given source to a destination](#)
32. [Print all possible strings that can be made by placing spaces| Set-1](#)
33. [Print all possible strings that can be made by placing spaces| Set-2](#)
34. [Print all longest common sub-sequences in lexicographical order](#)
35. [Smallest expression to represent a number using single digit](#)
36. [Given an array A\[\] and a number x, check for pair in A\[\] with sum as x](#)

- 37. [Combinations where every element appears twice and distance between appearances is equal to the value](#)
- 38. [A backtracking approach to generate n bit Gray Codes](#)
- 39. [Check if a given string is sum-string](#)
- 40. [Fill 8 numbers in grid with given conditions](#)
- 41. [Minimize number of unique characters in string](#)
- 42. [Backtracking | Set 9 \(Magnet Puzzle\)](#)
- 43. [Prime numbers after prime P with sum S](#)