

Branch and Bound

Branch and bound is an algorithmic technique used for solving optimization problem. Branch and bound is a method used in combinatorial optimization and search algorithms to efficiently solve problems by systematically exploring the search space. It involves breaking down the problem into smaller subproblems, known as "branches," and using bounds to determine whether each branch needs further exploration or can be pruned. The technique aims to minimize the number of branches explored, optimizing the search for an optimal solution.

Example:

Items	1	2	3	4
Price	10	10	12	18
Weight	2	4	6	9
Knapsack Wt	15			

Soln: UB=

C=