Assignment - 13

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Code:

Comparison of dynamic and greedy strategy (write in tabular form).

Output:

Dynamic programming	Greedy strategy
Provides the optimal solution for a given problem.	May not always provide the optimal solution.
Solves all subproblems, often by memoization or bottom-up approach.	Does not necessarily break down the problem into subproblems.
Deals efficiently with overlapping subproblems.	May not handle overlapping subproblems optimally.
Can have higher time complexity due to solving all subproblems.	Often has lower time complexity as it makes locally optimal choices.
May require more space due to storing solutions to subproblems.	Typically requires less space.
Useful when the problem exhibits optimal substructure and overlapping subproblems	Effective when a greedy choice leads to an optimal solution.
Knapsack Problem, Fibonacci Sequence, Shortest Paths in Graphs.	Coin Change Problem, Fractional Knapsack Problem.