Utilization of Algorithms,Dynamic programming,Optimization

INTRODUCTION TO DYNAMIC PROGRAMMING

- Dynamic programming is an algorithm design technique for optimization problems often minimizing or maximizing.

- Programming refers to the use of tables (arrays) to construct a solution.

- In dynamic programming we usually reduce time by increasing the amount of space.

- The table is then used for finding the optimal solution to larger problems.

- Time is saved since each sub-problem is solved only once.

- In such problems there can be many possible solutions. Each solution has a value, and we wish to find a solution with the optimal (minimum or maximum) value.