☐ Chapter 8
☐ Characteristics of dynamic programming technique

Dynamic programming: a technique for solving problems with overlapping subproblems.

Subproblems : Typically arise from a reccurence relating a given problem's solution to solutions of its smaller subproblems.

Table : Records solutions to these subproblems so you do not have to calculate them again.

Extra space : Using extra space can sometimes be avoided for these types of problems.

Bottom up/ Top down : Bottom up solves all smaller subproblems while Top down tries to only solve necessary ones.

Recurrence relation : Finding a recurrence relation is crucial for solving thes problems.

Principal of Optimality : an optimal solution to any instance of an optimization problem is composed of optimal solutions to its subinstances.