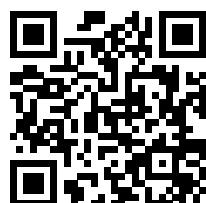




## **SoulShift - Educational Q&A Platform**

### **General Questions**

Practice Questions



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**Q1. Which of the following techniques is commonly used in dynamic programming to build solutions?**

- A. Divide and conquer
- B. Greedy algorithms
- C. Bottom-up approach
- D. Brute force

*Solution: The bottom-up approach is commonly used in dynamic programming to build solutions iteratively from smaller subproblems.*

**Q2. What is the main characteristic of a problem that can be solved using dynamic programming?**

- A. It can be solved in linear time
- B. It has optimal substructure
- C. It requires sorting
- D. It can be solved using a greedy approach

*Solution: A problem that can be solved using dynamic programming must have optimal substructure, meaning the optimal solution can be constructed from optimal solutions of its subproblems.*



