SoulShift

SoulShift – Educational Q&A Platform

General Questions

Practice Questions

Q1. Which of the following is a common real-world application of dynamic programming?
   A. Image compression
   B. Network routing
   C. Stock market prediction
   D. Resource allocation

Solution: Dynamic programming is often used in resource allocation problems where optimal distribution of limited resources is required.

Q2. Which of the following algorithms uses dynamic programming to find the optimal solution?
   A. Dijkstra's algorithm
   B. Bellman-Ford algorithm
   C. Floyd-Warshall algorithm
   D. Merge sort

Solution: The Floyd-Warshall algorithm uses dynamic programming to find the shortest paths between all pairs of vertices in a weighted graph.