SoulShift

SoulShift – Educational Q&A Platform

General Questions

Practice Questions

Q1. If a graph has 5 vertices and 7 edges, what is the maximum number of edges in a simple undirected graph?
   A. 10
   B. 12
   C. 15
   D. 20

Solution: In a simple undirected graph, the maximum number of edges is given by the formula V(V-1)/2. For 5 vertices, it is 5(5-1)/2 = 10.

Q2. What is the main disadvantage of Dijkstra's algorithm?
   A. It is not optimal
   B. It requires a lot of memory
   C. It cannot handle negative weights
   D. It is too slow for large graphs

Solution: The main disadvantage of Dijkstra's algorithm is that it cannot handle graphs with negative weight edges, which can lead to incorrect results.