SoulShift

SoulShift – Educational Q&A Platform

General Questions

Practice Questions

Q1. What is the main difference between Dijkstra's algorithm and A* search algorithm?

A. A* uses heuristics to improve efficiency
B. Dijkstra's algorithm is faster
C. A* can only be used on trees
D. Dijkstra's algorithm is for unweighted graphs

Solution: The main difference is that A uses heuristics to guide its search, making it more efficient in many cases compared to Dijkstra's algorithm.*

Q2. If a graph has 5 vertices and 10 edges, what is the maximum number of edges it can have?

A. 5
B. 10
C. 20
D. 25

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