

TIME COMPLEXITIES $O()$ & DESCRIPTION

Algorithm	Time Complexity	Description
Breadth-First Search (BFS)	$O(V + E)$	Explores the graph level by level, visiting all reachable vertices.
Depth-First Search (DFS)	$O(V + E)$	Explores the graph by traversing one path as far as possible before backtracking.
Dijkstra's Algorithm	$O(V \log V + E)$ (Fibonacci heap)	Finds the shortest paths based on edge weights using a priority queue. (More efficient)