

A1

9559 exp-3

Postlab

Q1) What is the time complexity of the water jug problem?

Ans The time complexity of the water Jug problem using BFS or DFS is approximately $O(m \times n)$ where m and n are the capacities of the two jugs.

Q2) Why is DFS not used for solving a water jug problem?

Ans DFS is not typically used for solving the water jug problem because it may get stuck in deep branches without finding a solution. It does not guarantee finding the shortest path to the solution and may exhaust memory if the search space is large.