***Superior University***

**PAI Lab task 03**

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Program:

**Artificial Intelligence**

Submitted to:

**Sir Rasikh**

**Water Jug Problem**

***Summary:***

This code solves the water jug problem using a (DFS) approach. It starts with both jugs empty and explores possible actions like filling, emptying, or pouring water between jugs. It keeps track of visited states to avoid repetition and records each step. If the target amount of water is reached in either jug, it prints the solution; otherwise, it reports that no solution was found.

**Output: Output:**



