**PROGRAM [10]:**

class BlockWorldAgent:

    def solve(self, initial, goal):

        # Replace this with your actual implementation of the solve method

        # This is just a placeholder

        return f"Solving {initial} to {goal}"

def test():

    test\_agent = BlockWorldAgent()

    initial\_arrangement\_1 = [["A", "B", "C"], ["D", "E"]]

    goal\_arrangement\_1 = [["A", "C"], ["D", "E", "B"]]

    goal\_arrangement\_2 = [["A", "B", "C", "D", "E"]]

    goal\_arrangement\_3 = [["D", "E", "A", "B", "C"]]

    goal\_arrangement\_4 = [["C", "D"], ["E", "A", "B"]]

    print(test\_agent.solve(initial\_arrangement\_1, goal\_arrangement\_1))

    print(test\_agent.solve(initial\_arrangement\_1, goal\_arrangement\_2))

    print(test\_agent.solve(initial\_arrangement\_1, goal\_arrangement\_3))

    print(test\_agent.solve(initial\_arrangement\_1, goal\_arrangement\_4))

    initial\_arrangement\_2 = [["A", "B", "C"], ["D", "E", "F"], ["G", "H", "I"]]

    goal\_arrangement\_5 = [["A", "B", "C", "D", "E", "F", "G", "H", "I"]]

    goal\_arrangement\_6 = [["I", "H", "G", "F", "E", "D", "C", "B", "A"]]

    goal\_arrangement\_7 = [["H", "E", "F", "A", "C"], ["B", "D"], ["G", "I"]]

    goal\_arrangement\_8 = [["F", "D", "C", "I", "G", "A"], ["B", "E", "H"]]

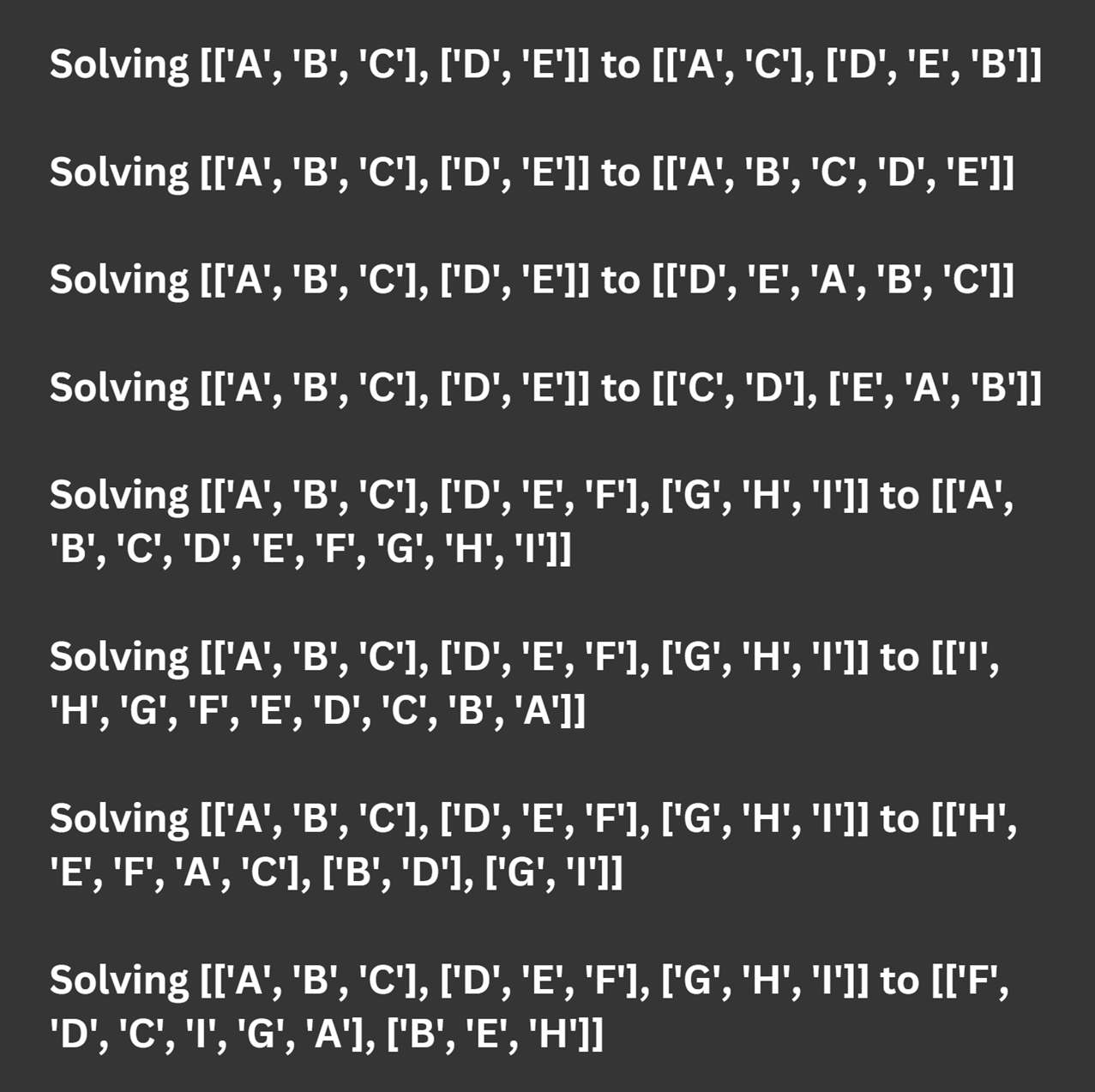
    print(test\_agent.solve(initial\_arrangement\_2, goal\_arrangement\_5))

    print(test\_agent.solve(initial\_arrangement\_2, goal\_arrangement\_6))

    print(test\_agent.solve(initial\_arrangement\_2, goal\_arrangement\_7))

    print(test\_agent.solve(initial\_arrangement\_2, goal\_arrangement\_8))

**OUTPUT [10]:**



if \_\_name\_\_ == "\_\_main\_\_":

    test()