

Usage Example

```
# Scenario: Mate in 1 move
# Black King trapped in h8, White Rook can deliver mate
problem_board = [
    ['. ', '. ', '. ', '. ', '. ', '. ', '. ', 'k'], # Black King in h8
    ['. ', '. ', '. ', '. ', '. ', '. ', 'p', 'p'], # Black Pawns blocking
    ['. ', '. ', '. ', '. ', '. ', '. ', '. ', '.'],
    ['. ', '. ', '. ', '. ', '. ', '. ', '. ', '.'],
    ['. ', '. ', '. ', '. ', '. ', '. ', '. ', '.'],
    ['. ', '. ', '. ', '. ', '. ', '. ', '. ', '.'],
    ['. ', '. ', '. ', '. ', '. ', '. ', '. ', '.'],
    ['R', '. ', '. ', '. ', 'K', '. ', '. ', '.'] # White Rook in a1
]

# Run the solver
solution = solve_mate_in_one(problem_board)

# Expected output:
# --- Starting Solution Search ---
# Moves to analyze: X
# !!! CHECKMATE FOUND !!!
# Winning move: R from (7,0) to (0,0) # Rook goes to a8, delivering mate
```