8-Puzzle solver using Search Algorithms

The 8-puzzle problem using search algorithms is implemented. We have a 3x3 square with 9 houses, 8 of which are labeled with numbers 1 to 8, and one house is empty (you can assign zero to it). The labeled squares with the help of the empty square in such a way that with the least number of steps possible are arranged.
Moving the squares vertically or horizontally is allowed to achieve the desired order.

The search algorithms used: DFS , BFS , IDS, UCS, A*
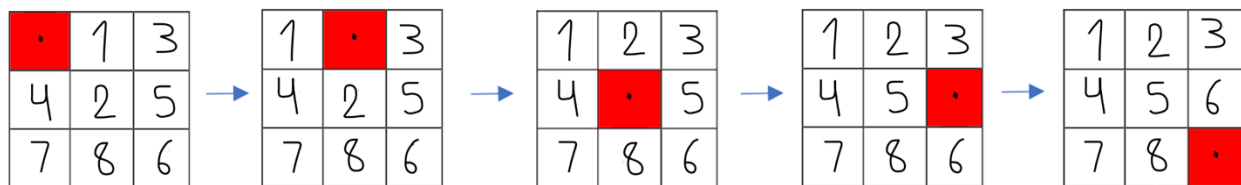
Input:
A scrambled square as initial state (a 3x3 matrix)

Output:
An action sequence to solve the desired puzzle along with time and memory consumption for
Reach the goal

Example:

Action sequence: Right – Left – Right – Left