

→ Implement vaccum clean agent.

Algorithm

Initialize the agent starting (A, B)
loop

untill all cells are clean.

a. Perceive the current cell.

b. if the cell is dirty.

clean the current cell

Else.

check surrounding cell (up, down, left, right) to see if any are dirty.

move to the next dirty cell using a strategy such as BFS, DFS (b) Random movement.

if no dirty cells are perceived, stop all cells are clean.

end loop.

→ BFS algorithm for 8 puzzle game

Algorithm:

let fringe be a list of containing the initial state.

loop

if fringe is empty return failure

Node ← remove-first (fringe)

if node is a goal

then return the path from initial state to Node else generate all successor of Node and add generated nodes to the back of fringe

End loop.

→ DFS algorithm for 8 puzzle game

Algorithm:

let fringe be a list containing the initial state.
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End loop.

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