CS3243 Assignment 4

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Q3.

a)

Using 0-based indexing, positions in the puzzle are indicated by (x, y) where (0, 0) is the top left of the puzzle.

Action 1: Blank space at (2, 0) move left to swap with 3 at (1, 0)

Action 2: Blank space at (1 ,0) move left to swap with 2 at (0, 0)

Action 3: Blank space at (0, 0) move down to swap with 1 at (0, 1)

Action 4: Blank space at (0, 1) move right to swap with 8 at (1, 1)

The trace terminated at a global minima.

b)

Action 1: Blank space at (2, 0) move left to swap with 3 at (1, 0)

Action 2: Blank space at (1 ,0) move left to swap with 2 at (0, 0)

Action 3: Blank space at (0, 0) move down swap with 1 at (0, 1)

Action 4: Blank space at (0, 1) move down to swap with 8 at (0, 2)

The trace terminated at a local minima.