CSC Practical
4129462
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Written Answers.

1. State: Soldiers are arranged in bomb shelter cells, Each soldier occupies a specific cell, and the cells are numbered from 1 to 13.

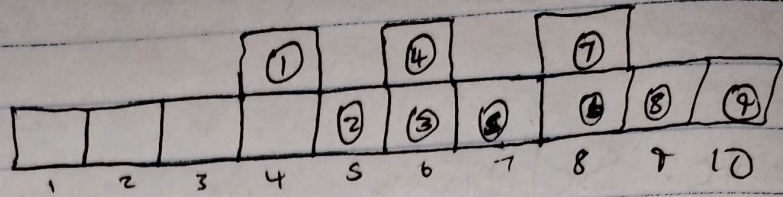$$S_0 = (E, 2, 3, 4, 5, 6, 7, 8, 9, 1, E, E, E)$$

2. Goal State: Arrangement of cells soldiers where soldier (1) is in cell number 1, soldier (2) is in cell number 2, and so on up to soldier 9 in cell 9.
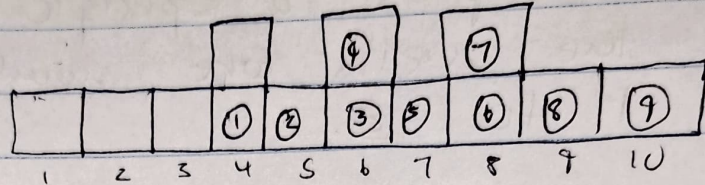
$$G = (1, 2, 3, 4, 5, 6, 7, 8, 9, E, E, E, E)$$

- Actions: Moving a soldier to an adjacent empty cell.
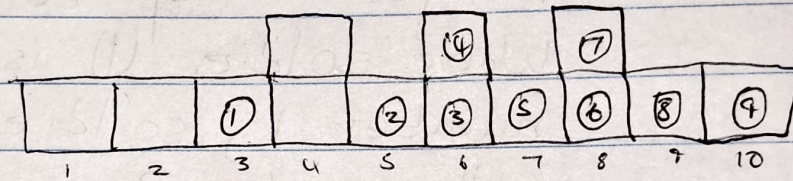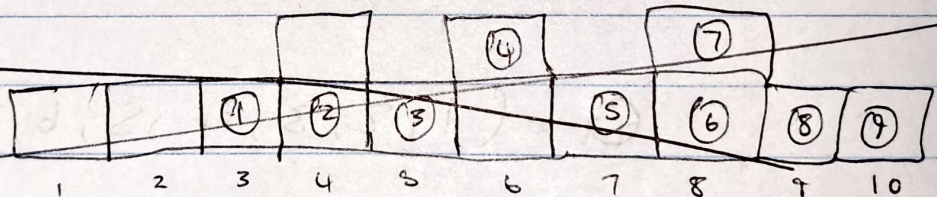
Initial $S_R = t$

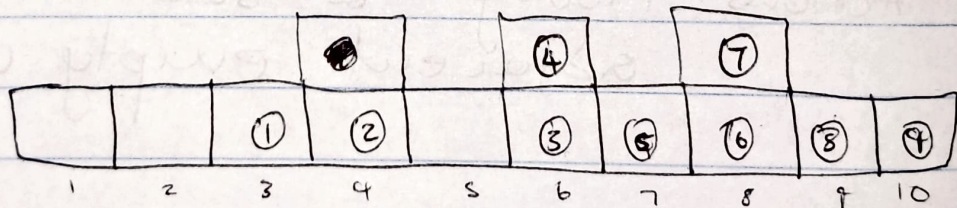Initial State:

Level : 1

heuristic value = 4

Level2 :

heuristic value = 4

Level3 :

Level3 :

heuristic value = 4