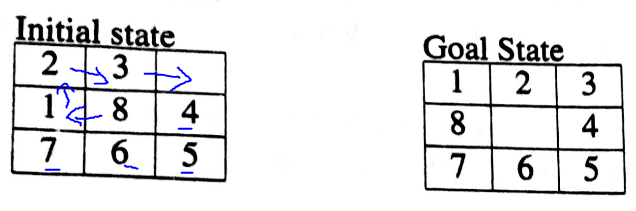


‘G’ will be pruned.

15. 

h1(n) = 4

h2(n) = 1 + 1 + 1 + 1 = 4

The manhatten distance is the heuristic used.

18. Enlist the three operators used in genetic algorithms.

The three operators used in genetic algorithms would be:

* Mutation
* Crossover
* Selection

19. Can you differentiate between hill climbing methods and simulated annealing algorithms?

Hill Climbing is very prone to finding local maximums.

With simulated annealing there is a lot of randomness early, and it gets less random over time, to fix the issue with Hill climbing of finding a local maximum. Therefore, it is more likely to find a global optimum.