PROGRAM OUTPUTS FOR HEURISTIC FUNCTIONS :

Instance - 1:

Initial state : [5, 3, 6, 0, 2, 1, 7, 8, 4]

Goal state : [1, 2, 3, 4, 5, 6, 7, 8, 0]

Manhattan :

Time taken : 0.016946 seconds

Nodes removed from the frontier: 708

Total Steps : 21

Misplaced Tiles :

Time taken : 0.062790 seconds

Nodes removed from the frontier: 6368

Total Steps : 21

Euclidean :

Time taken : 0.022967 seconds

Nodes removed from the frontier: 1289

Total Steps : 21

Instance - 2:

Initial state : [3, 6, 8, 7, 2, 4, 0, 5, 1]

Goal state : [1, 2, 3, 4, 5, 6, 7, 8, 0]

Manhattan :

Time taken : 0.006979 seconds

Nodes removed from the frontier: 492

Total Steps : 22

Misplaced Tiles :

Time taken : 0.081842 seconds

Nodes removed from the frontier: 5894

Total Steps : 22

Euclidean :

Time taken : 0.032071 seconds

Nodes removed from the frontier: 855

Total Steps : 22