Sample Three: // Length 20 input> solve Enter puzzle of format x x x x x x x x (you don't need to have spaces between) enter> 450278316 Puzzle To Solve:
4 5 0 2 7 8 3 1 6
Solved puzzle:
0 1 2 3 4 5 6 7 8
MANHATTAN DISTANCE
Time took to solve: 0.892559 ms Total Solved Depth: 20 nodes Search Cost: 986
Switching to misplaced and solving
MISPLACED TILES
Time took to solve: 3.66375 ms Total Solved Depth: 20 nodes Search Cost: 4146

input> show step: 0

action taken: None

450

278

3 1 6

step: 1

action taken: Down

458

270

3 1 6

step: 2

action taken: Left

458

207

3 1 6

step: 3

action taken: Down

458

217

306

step: 4

action taken: Right

458

217

360

step: 5

action taken: Up

458

210

367

step: 6

action taken: Up

450

218

367

step: 7

action taken: Left

405

218

367

step: 8

action taken: Down

4 1 5

208

367

step: 9

action taken: Left

4 1 5

028

367

step: 10

action taken: Up

0 1 5

428

367

step: 11

action taken: Right

105

428

367

step: 12

action taken: Down

125

408

step: 13

action taken: Left

125

048

367

step: 14

action taken: Down

125

348

067

step: 15

action taken: Right

125

348

607

step: 16

action taken: Right

125

3 4 8

670

step: 17

action taken: Up

125

3 4 0

678

step: 18

action taken: Up

120

3 4 5

678

step: 19

action taken: Left

102

3 4 5

678

step: 20

action taken: Left

012

3 4 5

678

## input> dump

input>