Nathan Sucher

Homework 1 Task 1

**Output For Case 1:**

DONE

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Number of steps: 131

Path to Goal: ['Down', 'Down', 'Down', 'Left']

Time: 0.020991802215576172 seconds

Open List Size: 268

Nodes Added to Open List: 399

Nodes Added to Closed List: 131

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Steps From Goal to Start:

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State ID: 9

Parent State ID: 6

Depth: 4

Move: Left

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State ID: 6

Parent State ID: 4

Depth: 3

Move: Down

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State ID: 4

Parent State ID: 3

Depth: 2

Move: Down

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State ID: 3

Parent State ID: 1

Depth: 1

Move: Down

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State ID: 1

Parent State ID: None

Depth: 0

Move: None

**Output For Case 2:**

DONE

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Number of steps: 1143

Path to Goal: ['Up', 'Up', 'Left', 'Down', 'Right', 'Down']

Time: 0.5213775634765625 seconds

Open List Size: 2384

Nodes Added to Open List: 3527

Nodes Added to Closed List: 1143

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Steps From Goal to Start:

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State ID: 12

Parent State ID: 10

Depth: 6

Move: Down

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State ID: 10

Parent State ID: 7

Depth: 5

Move: Right

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State ID: 7

Parent State ID: 6

Depth: 4

Move: Down

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State ID: 6

Parent State ID: 3

Depth: 3

Move: Left

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State ID: 3

Parent State ID: 2

Depth: 2

Move: Up

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State ID: 2

Parent State ID: 1

Depth: 1

Move: Up

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State ID: 1

Parent State ID: None

Depth: 0

Move: None

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