

Jillian Empey

(See code output below)

```
jeempey@PI01:~/315/lab2/lab2 $ gcc towers.s
jeempey@PI01:~/315/lab2/lab2 $ ./a.out
Enter number of discs to be moved: 1
Move from peg 1 to peg 3

1 discs moved from peg 1 to peg 3 in 1 steps.
jeempey@PI01:~/315/lab2/lab2 $ ./a.out
Enter number of discs to be moved: 2
Move from peg 1 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 3

2 discs moved from peg 1 to peg 3 in 3 steps.
jeempey@PI01:~/315/lab2/lab2 $ ./a.out
Enter number of discs to be moved: 3
Move from peg 1 to peg 3
Move from peg 1 to peg 2
Move from peg 3 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 1
Move from peg 2 to peg 3
Move from peg 1 to peg 3

3 discs moved from peg 1 to peg 3 in 7 steps.
jeempey@PI01:~/315/lab2/lab2 $ ./a.out
Enter number of discs to be moved: 4
Move from peg 1 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 3
Move from peg 1 to peg 2
Move from peg 3 to peg 1
Move from peg 3 to peg 2
Move from peg 1 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 3
Move from peg 2 to peg 1
Move from peg 3 to peg 1
Move from peg 2 to peg 3
Move from peg 1 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 3

4 discs moved from peg 1 to peg 3 in 15 steps.
jeempey@PI01:~/315/lab2/lab2 $ █
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jeempey@PI01:~/315/lab2/lab2 $ ./a.out
Enter number of discs to be moved: 5
Move from peg 1 to peg 3
Move from peg 1 to peg 2
Move from peg 3 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 1
Move from peg 2 to peg 3
Move from peg 1 to peg 3
Move from peg 1 to peg 2
Move from peg 3 to peg 2
Move from peg 3 to peg 1
Move from peg 2 to peg 1
Move from peg 3 to peg 2
Move from peg 1 to peg 3
Move from peg 1 to peg 2
Move from peg 3 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 1
Move from peg 2 to peg 3
Move from peg 1 to peg 3
Move from peg 2 to peg 1
Move from peg 3 to peg 2
Move from peg 3 to peg 1
Move from peg 2 to peg 1
Move from peg 2 to peg 3
Move from peg 1 to peg 3
Move from peg 1 to peg 2
Move from peg 3 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 1
Move from peg 2 to peg 3
Move from peg 1 to peg 3

5 discs moved from peg 1 to peg 3 in 31 steps.
jeempey@PI01:~/315/lab2/lab2 $
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jeempey@PI01:~/315/lab2/lab2 $ ./a.out
Enter number of discs to be moved: 6
Move from peg 1 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 3
Move from peg 1 to peg 2
Move from peg 3 to peg 1
Move from peg 3 to peg 2
Move from peg 1 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 3
Move from peg 2 to peg 1
Move from peg 3 to peg 1
Move from peg 2 to peg 3
Move from peg 1 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 3
Move from peg 1 to peg 2
Move from peg 3 to peg 1
Move from peg 3 to peg 2
Move from peg 1 to peg 2
Move from peg 3 to peg 1
Move from peg 2 to peg 3
Move from peg 2 to peg 1
```

```
Move from peg 3 to peg 1
Move from peg 3 to peg 2
Move from peg 1 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 3
Move from peg 1 to peg 2
Move from peg 3 to peg 1
Move from peg 3 to peg 2
Move from peg 1 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 3
Move from peg 2 to peg 1
Move from peg 3 to peg 1
Move from peg 2 to peg 3
Move from peg 1 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 3
Move from peg 2 to peg 1
Move from peg 3 to peg 1
Move from peg 3 to peg 2
Move from peg 1 to peg 2
Move from peg 3 to peg 1
Move from peg 2 to peg 3
Move from peg 2 to peg 1
Move from peg 3 to peg 1
Move from peg 2 to peg 3
Move from peg 1 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 3
Move from peg 1 to peg 2
Move from peg 3 to peg 1
Move from peg 3 to peg 2
Move from peg 1 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 3
Move from peg 2 to peg 1
Move from peg 3 to peg 1
Move from peg 2 to peg 3
Move from peg 1 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 3
```

6 discs moved from peg 1 to peg 3 in 63 steps.

jeempey@101:~/515/lab2/\$./a.out

Enter number of discs to be moved: 7

Move from peg 1 to peg 3

Move from peg 1 to peg 2

Move from peg 3 to peg 2

Move from peg 1 to peg 3

Move from peg 2 to peg 1

Move from peg 2 to peg 3

Move from peg 1 to peg 3

Move from peg 1 to peg 2

Move from peg 3 to peg 2

Move from peg 3 to peg 1

Move from peg 2 to peg 1

Move from peg 3 to peg 2

Move from peg 1 to peg 3

Move from peg 1 to peg 2

Move from peg 3 to peg 2

Move from peg 1 to peg 3

Move from peg 2 to peg 1

Move from peg 2 to peg 3

Move from peg 1 to peg 3

Move from peg 2 to peg 1

Move from peg 3 to peg 2

Move from peg 3 to peg 1

Move from peg 2 to peg 1

Move from peg 2 to peg 3

Move from peg 1 to peg 3

Move from peg 1 to peg 2

Move from peg 3 to peg 2

Move from peg 1 to peg 3

Move from peg 2 to peg 1

Move from peg 2 to peg 3

Move from peg 1 to peg 3

Move from peg 1 to peg 2

Move from peg 3 to peg 2

Move from peg 3 to peg 1

Move from peg 2 to peg 1

Move from peg 3 to peg 2

Move from peg 1 to peg 3

Move from peg 1 to peg 2

Move from peg 3 to peg 2

Move from peg 3 to peg 1

Move from peg 2 to peg 1

Move from peg 2 to peg 3


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Move from peg 3 to peg 2
Move from peg 3 to peg 1
Move from peg 2 to peg 1
Move from peg 2 to peg 3
Move from peg 1 to peg 3
Move from peg 2 to peg 1
Move from peg 3 to peg 2
Move from peg 3 to peg 1
Move from peg 2 to peg 1
Move from peg 2 to peg 3
Move from peg 1 to peg 3
Move from peg 1 to peg 2
Move from peg 3 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 1
Move from peg 2 to peg 3
Move from peg 1 to peg 3
Move from peg 1 to peg 2
Move from peg 3 to peg 2
Move from peg 3 to peg 1
Move from peg 2 to peg 1
Move from peg 3 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 1
Move from peg 2 to peg 3
Move from peg 1 to peg 3
Move from peg 2 to peg 1
Move from peg 3 to peg 2
Move from peg 3 to peg 1
Move from peg 2 to peg 1
Move from peg 2 to peg 3
Move from peg 1 to peg 3
Move from peg 1 to peg 2
Move from peg 3 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 1
Move from peg 2 to peg 3
Move from peg 1 to peg 3
```

7 discs moved from peg 1 to peg 3 in 127 steps.

jeempey@PI01:~/315/lab2/lab2 \$

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jeempey@PI01:~/315/lab2/lab2 $ ./a.out
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Enter number of discs to be moved: 8
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Move from peg 1 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 3
Move from peg 1 to peg 2
Move from peg 3 to peg 1
Move from peg 3 to peg 2
Move from peg 1 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 3
Move from peg 2 to peg 1
Move from peg 3 to peg 1
Move from peg 2 to peg 3
Move from peg 1 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 3
Move from peg 1 to peg 2
Move from peg 3 to peg 1
Move from peg 3 to peg 2
Move from peg 1 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 3
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Move from peg 3 to peg 2
Move from peg 1 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 3
Move from peg 2 to peg 1
Move from peg 3 to peg 1
Move from peg 2 to peg 3
Move from peg 1 to peg 2
Move from peg 1 to peg 3
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Move from peg 1 to peg 2
Move from peg 1 to peg 3
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Move from peg 3 to peg 2
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Move from peg 3 to peg 1
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Move from peg 2 to peg 3
Move from peg 1 to peg 2
Move from peg 3 to peg 1
Move from peg 3 to peg 2
Move from peg 1 to peg 2
Move from peg 1 to peg 3
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Move from peg 3 to peg 1
Move from peg 3 to peg 2
Move from peg 1 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 3
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Move from peg 2 to peg 3
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Move from peg 3 to peg 1
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Move from peg 3 to peg 1
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Move from peg 2 to peg 3
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Move from peg 1 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 3
Move from peg 2 to peg 1
Move from peg 3 to peg 1
Move from peg 3 to peg 2
Move from peg 1 to peg 2
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Move from peg 2 to peg 3

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Move from peg 1 to peg 3
Move from peg 2 to peg 3
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Move from peg 2 to peg 3
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Move from peg 3 to peg 1
Move from peg 3 to peg 2
Move from peg 1 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 3
Move from peg 2 to peg 1
Move from peg 3 to peg 1
Move from peg 2 to peg 3
Move from peg 1 to peg 2
Move from peg 1 to peg 3
Move from peg 2 to peg 3
```

8 discs moved from peg 1 to peg 3 in 255 steps.