Advent of Code

— 2024 —

by Lord Baryhobal
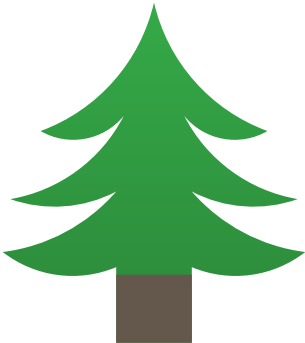
Stars: 39 / 50

Mon	Tue	Wed	Thu	Fri	Sat	Sun
						1 ★★
2 ★★	3 ★★	4 ★★	5 ★★	6 ★★	7 ★★	8 ★★
9 ★★	10 ★★	11 ★★	12 ★★	13 ★★	14 ★★	15 ★★
16	17 ★	18 ★★	19 ★★	20 ★	21	22 ★
23 ★★	24	25				

Contents

Day 1⭐⭐

Puzzle 1
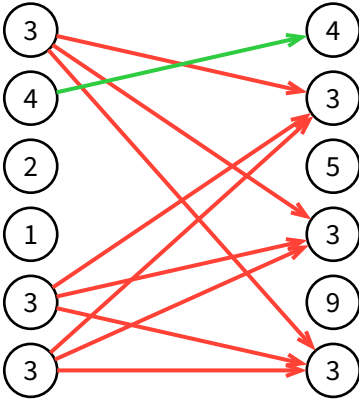
Example passes

Result: 2113135

Puzzle 2

Example passes

Figure 1: Example (visualization)

Result: 19097157

Day 2⭐⭐

Puzzle 1

Example passes

Result: 660

Puzzle 2

Example passes

7	6	4	2	1
−1	−2	−2	−1	

1	2	7	8	9
1	5	1	1	

9	7	6	2	1
−2	−1	−4	−1	

1	3	2	4	5
2	−1	2	1	

8	6	4	4	1
−2	−2	0	−3	

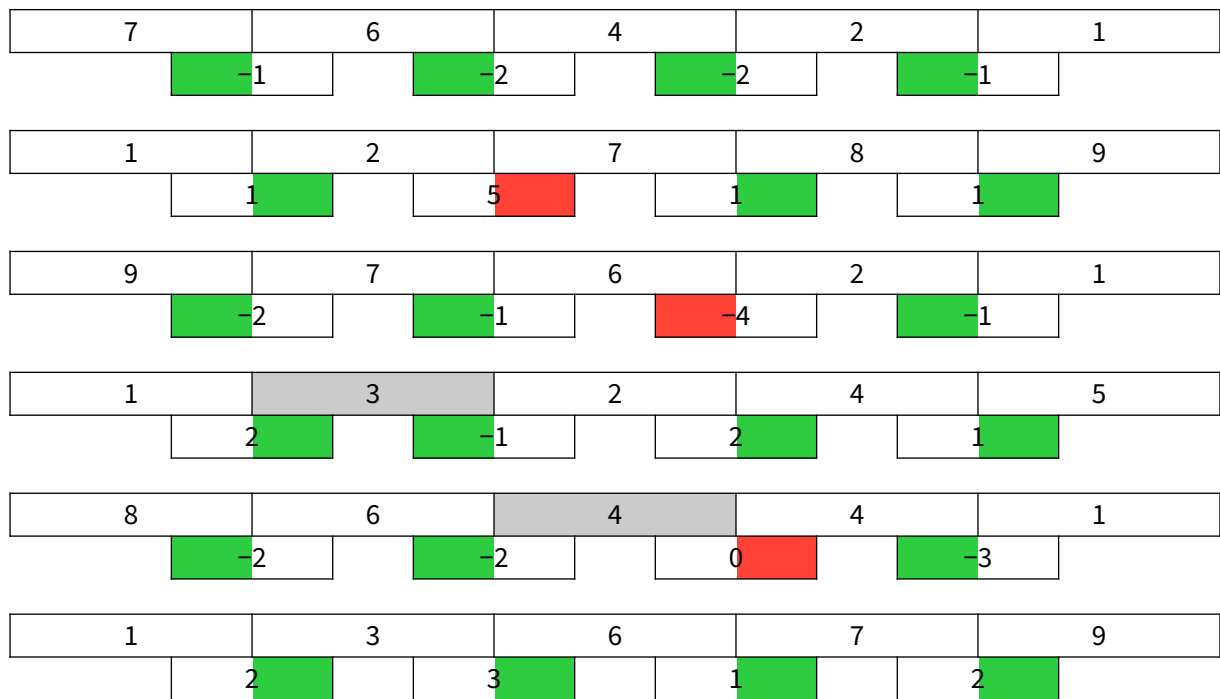| 1	3	6	7	9
2	3	1	2	

Figure 2: Example (visualization)

Result: 689

Day 3⭐⭐

Puzzle 1

> Example '1' passes

```
xmul(2,4)%&mul[3,7]!@^do_not_mul(5,5)+mul(32,64]then(mul(11,8)mul(8,5))
    8                        25                       88       40
```
Listing 1: Example '1' (visualization)

> Result: 187825547

Puzzle 2

> Example '2' passes

> Result: 85508223
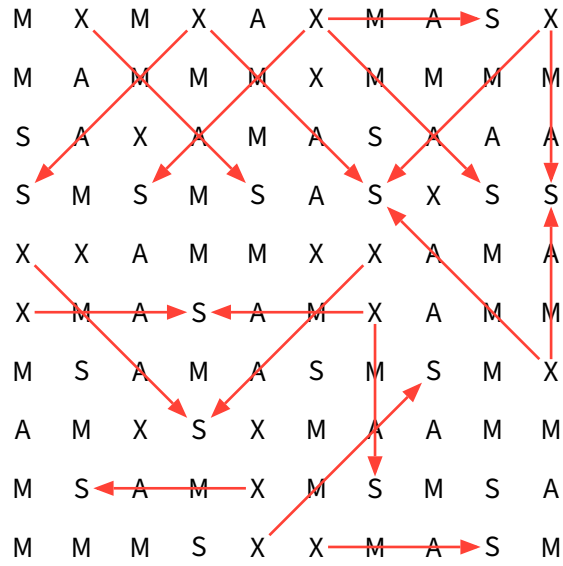
Day 4⭐⭐

Puzzle 1

Example passes

```
M   X   M   X   A   X   M   A   S   X
M   A   M   M   M   X   M   M   M   M
S   A   X   A   M   A   S   A   A   A
S   M   S   M   S   A   S   X   S   S
X   X   A   M   M   X   X   A   M   A
X   M   A   S   A   M   X   A   M   M
M   S   A   M   A   S   M   S   M   X
A   M   X   S   X   M   A   A   M   M
M   S   A   M   X   M   S   M   S   A
M   M   M   S   X   X   M   A   S   M
```
Figure 3: Example (visualization)

Result: 2654

Puzzle 2

Example passes

```
M   X   M   X   A   X   M   A   S   X
M   A   M   M   M   X   M   M   M   M
S   A   X   A   M   A   S   A   A   A
S   M   S   M   S   A   S   X   S   S
X   X   A   M   M   X   X   A   M   A
X   M   A   S   A   M   X   A   M   M
M   S   A   M   A   S   M   S   M   X
A   M   X   S   X   M   A   A   M   M
M   S   A   M   X   M   S   M   S   A
M   M   M   S   X   X   M   A   S   M
```
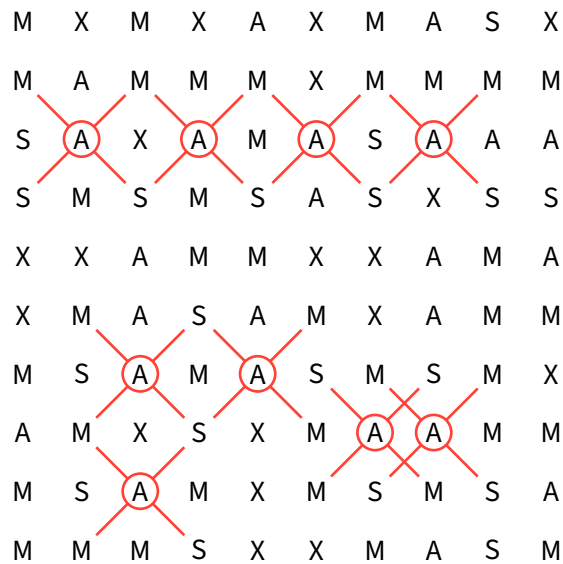Figure 4: Example (visualization)

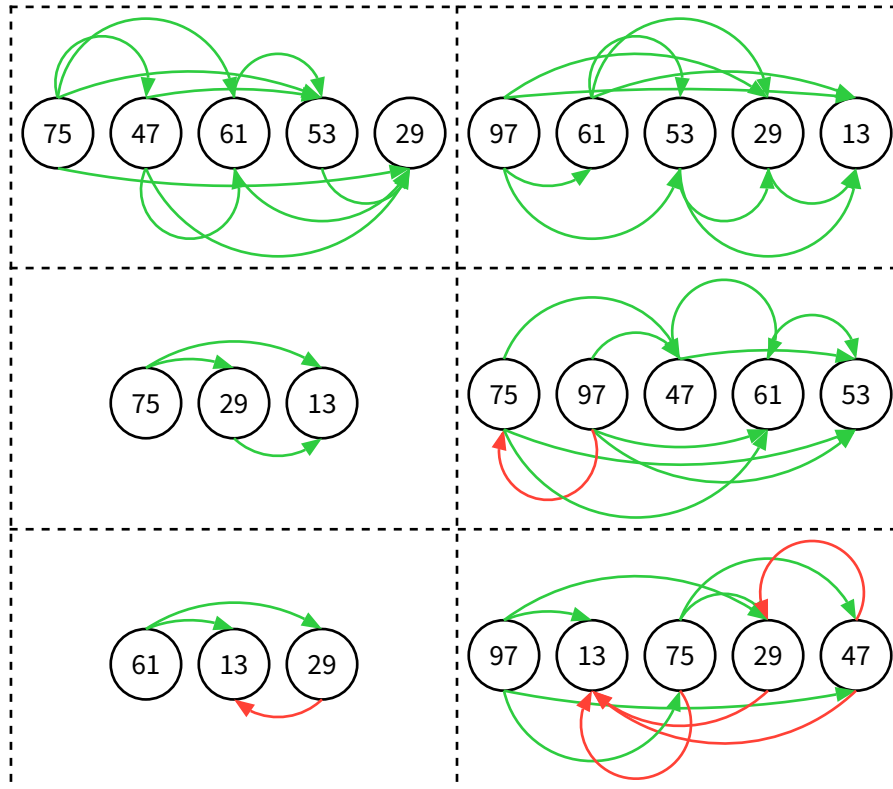Result: 1990

Day 5 ⭐⭐

Puzzle 1

Example passes

Figure 5: Example (visualization)

Result: 5374

Puzzle 2

Example passes
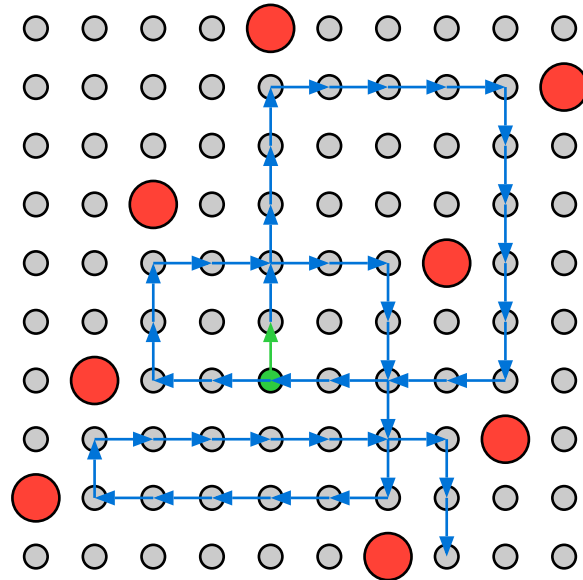
Result: 4260

Day 6⭐⭐

Puzzle 1

Example passes

Figure 6: Example (visualization)

Result: 4752
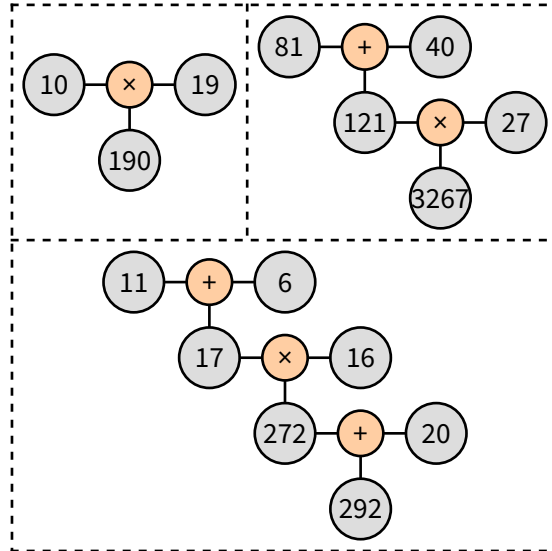
Puzzle 2

Example passes

Result: 1719

Day 7⭐⭐

Puzzle 1

Figure 7: Example (visualization)

Result: 850435817339

Puzzle 2
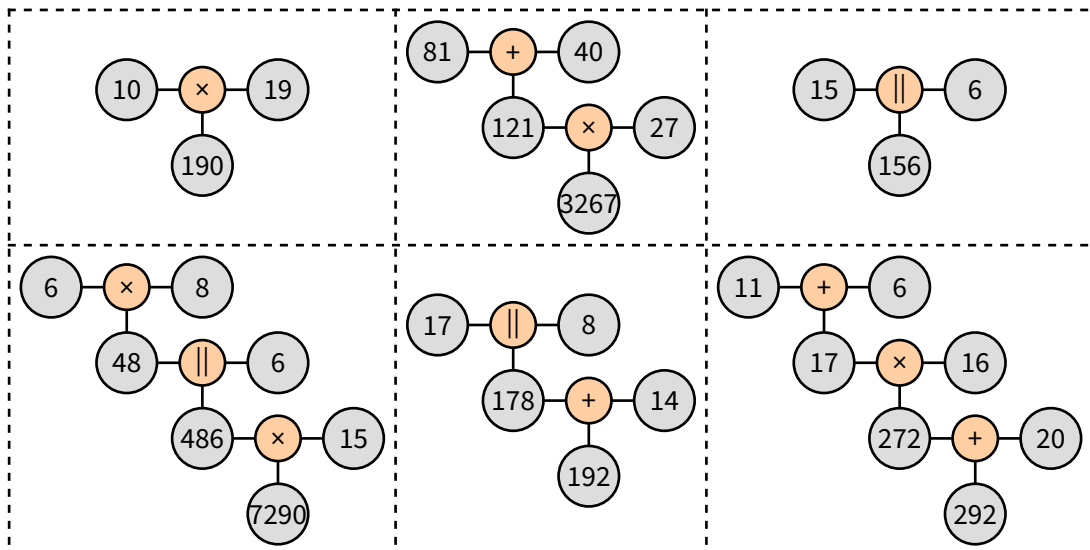
Figure 8: Example (visualization)

Result: 104824810233437

Day 8⭐⭐

Puzzle 1
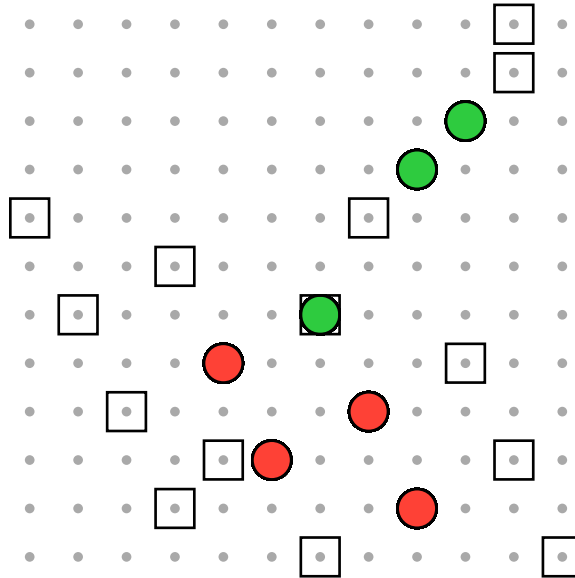
Example passes

Figure 9: Example (visualization)

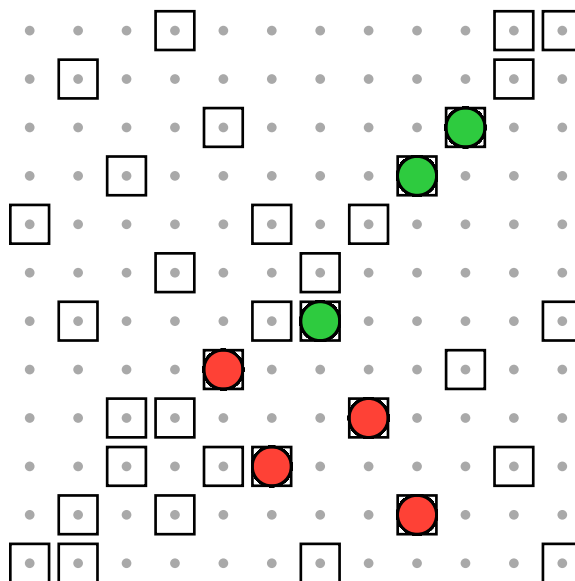Result: 265

Puzzle 2

Example passes

Figure 10: Example (visualization)

Result: 962

Day 9 ⭐⭐

Puzzle 1
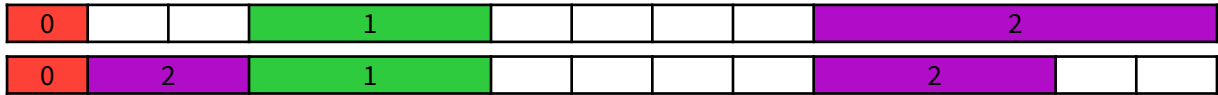
Example '1' passes

Figure 11: Example '1' (visualization)
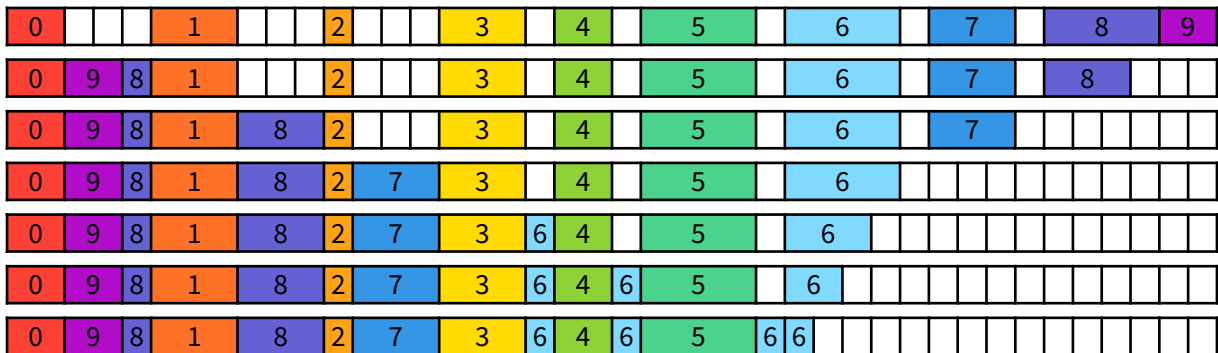
Example '2' passes

Figure 12: Example '2' (visualization)

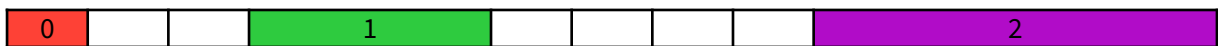Result: 6390180901651

Puzzle 2

Example '1' passes

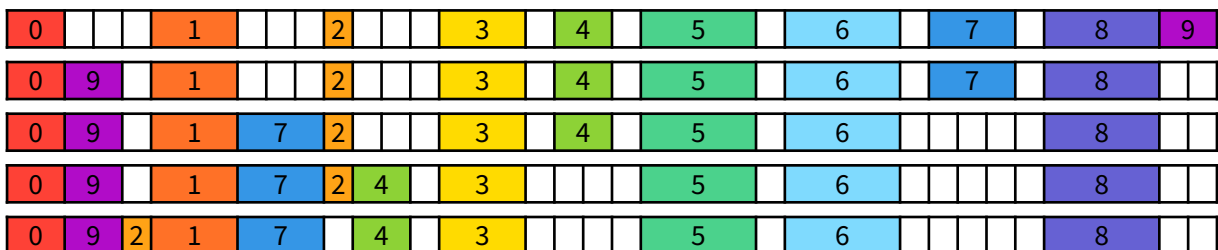Figure 13: Example '1' (visualization)

Example '2' passes

Figure 14: Example '2' (visualization)

Result: 6412390114238

Day 10⭐⭐

Puzzle 1

Example passes
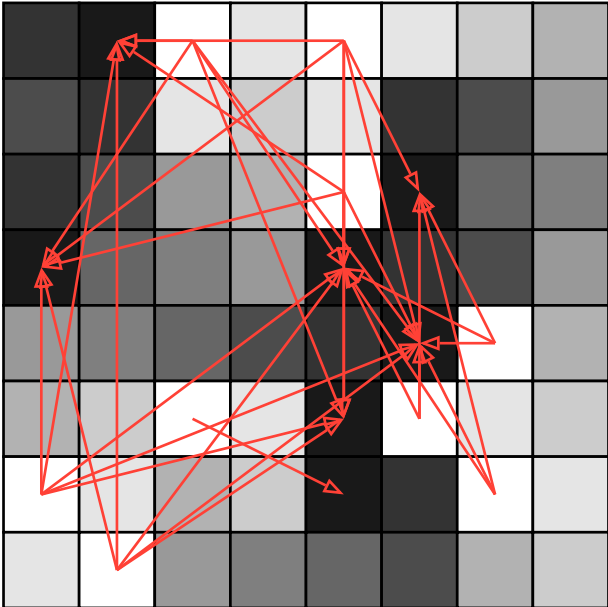
Figure 15: Example (visualization)

Result: 825

Puzzle 2

Example passes

Result: 1805

Day 11⭐⭐

Puzzle 1
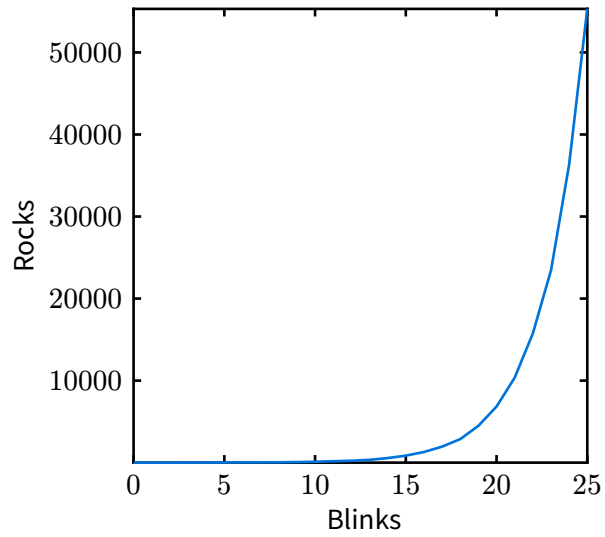
Figure 16: Example (visualization)

Result: 191690

Puzzle 2

Result: 228651922369703

Day 12⭐⭐

Puzzle 1

Example '1' passes   Example '2' passes   Example '3' passes

Result: 1450422

Puzzle 2

Example '1' passes   Example '2' passes   Example '3' passes

Example '4' passes   Example '5' passes

Result: 906606

Day 13⭐⭐

Puzzle 1

Example passes

Result: 29438

Puzzle 2

Example passes

Result: 104958599303720

Day 14⭐⭐

Puzzle 1

Example passes

Result: 230436441

Puzzle 2

Figure 17: Christmas tree easter egg

Result: 8270

Day 15 ⭐⭐

Puzzle 1

> Example '1' passes   Example '2' passes

> Result: 1526018

Puzzle 2

> Example '2' passes

> Result: 1550677

Day 16

Puzzle 1

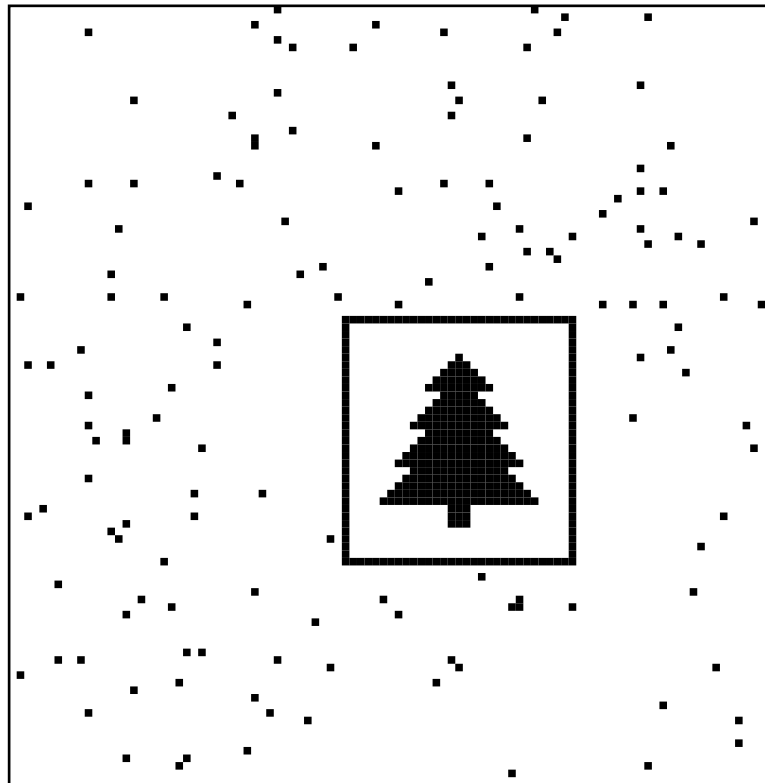Example '1' fails Expected '7036' got '0'   Example '2' fails Expected '11048' got '0'

Result: 0

Puzzle 2

Day 17 ⭐

Puzzle 1

Example '1' passes

Result: "2,7,6,5,6,0,2,3,1"

Puzzle 2

Example:

```
0,3,5,4,3,0
ADV: A >>= 3
OUT: OUT(A & 0b111)
JNZ: IF A != 0 {PC = 0}
```

Input:

```
2,4,1,5,7,5,1,6,4,2,5,5,0,3,3,0
BST: B = A & 0b111
BXL: B ^= 5
CDV: C = A >> B
BXL: B ^= 6
BXC: B ^= C
OUT: OUT(B & 0b111)
ADV: A >>= 3
JNZ: IF A != 0 {PC = 0}
```

Day 18⭐⭐

Puzzle 1

O	O		#	O	O	O
	O	#	O	O	#	O
	O	O	O	#	O	O
			#	O	O	#
		#	O	O	#	
	#		O	#		
#		#	O	O	O	O

Figure 18: Example (visualization)

Result: 290

Puzzle 2

Result: "64,54"

Day 19⭐⭐

Puzzle 1

Example passes

Result: 258

Puzzle 2

Example passes

Result: 632423618484345

Day 20 ⭐

Puzzle 1

Example passes   Example passes   Example passes   Example passes

Example passes   Example passes   Example passes   Example passes

Example passes   Example passes   Example passes

Result: 1429

Puzzle 2

Day 21

Puzzle 1

Example passes

Result: 170862

Puzzle 2

Day 22 ⭐

Puzzle 1

Example passes   Example passes   Example passes   Example passes

Example passes   Example passes   Example passes   Example passes

Example passes   Example passes

Result: 18261820068

Puzzle 2

Day 23⭐⭐

Puzzle 1

Example passes

Result: 1344

Puzzle 2

Example passes

Result: "ab,al,cq,cr,da,db,dr,fw,ly,mn,od,py,uh"