

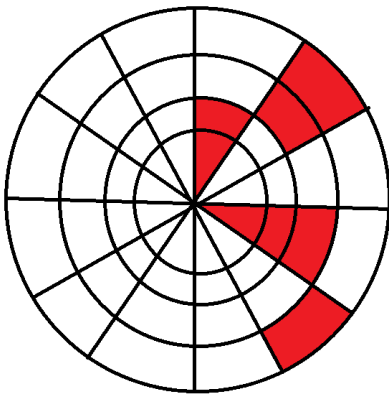
PAPER MARIO THE ORIGAMI KING Battle Puzzle Solver

Input File Format:

In order to run the executable, a text file called input.txt needs to be in the same directory. A sample input file looks like the following:

```
0 1 0 0 1 0 0 0 0 0 0 0
0 1 0 1 0 0 0 0 0 0 0 0
1 0 0 1 0 0 0 0 0 0 0 0
1 0 0 1 0 0 0 0 0 0 0 0
```

Each line represents a ring on the battlefield, the first line being the outermost ring and the last line being the innermost ring. Each column in the file represents the 12 columns on the battlefield. 1's are where enemies are on the battlefield and 0's are empty spaces. So this file would look like this in the game:



My recommendation for writing an input file is to select a space on the outer ring and work your way around. Which ever column you start with has to be the column you start with for every ring.

Running:

Once you have entered in the battlefield info, you can the run the executable and it will tell you the moves to solve the battle. Once the fight is over, you can change the input file (you do NOT have to close the program or the file at any point) and hit enter in the command line to read in the new battle and solve that one.

Solution:

Two boards will print out: What was read in, and the solved solution. The solution consists of several moves in the pattern of [S:R][column/ring #]:[amount]. The S stands for sliding a particular column a certain amount toward the center. R stands for rotate a particular ring clockwise around the arena.

```
Rotate Test Passed
Slide Test Passed
n to quit
3: 0 1 0 0 1 0 0 0 0 0 0 0
2: 0 1 0 1 0 0 0 0 0 0 0 0
1: 1 0 0 1 0 0 0 0 0 0 0 0
0: 1 0 0 1 0 0 0 0 0 0 0 0
SOLUTION: S0:2 S1:4 R3:11
3: 0 0 0 1 0 0 0 0 0 0 0 0
2: 0 0 0 1 0 0 0 0 0 0 0 0
1: 0 0 0 1 0 0 1 1 0 0 0 0
0: 0 0 0 1 0 0 1 1 0 0 0 0
Please make file Changes (hit Enter)
```

In this example the solution is to slide column 0 forward 2 spaces, slide column 1 forward 4 spaces, and then rotate ring 3 (outermost ring) clockwise 11 spaces. The final board is printed out. From here, you can enter 'n' to quit, or hit enter to read in the next arena.

Fun Note: you can open the moves text file that is generated to see all orientations the program generated to solve battle