

**Assignment 5**  
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**Version 2.0**

```
Start at 3,1.
File transcription complete!

Initial State:
0000000000
0SSS0SSSS0
0S0SSSS0S0
0M0S0S0KS0
0000000000

Final Layout:
0000000000
0122012220
010322S030
0M0S0S0430
0000000000

Findeth yon keys: Up, Up, Right, Right, Down, Right, Right, Up, Right, Right, Right, Down, Down, Left.
Process finished with exit code 0
```

(Screen clipped because they font was perfectly aligned in the system.out)

With my floor, I made it a little more complicated. My algorithm could have made some wrong turns, but in the end made it to the keys efficiently.

It's designed to move in this order: up, right, down, left. When one of those doesn't work, it tries the next and so on. Whenever it moves, it places a number behind it, letting itself know it has already been there, and considers it an "obstacle". After this, it continues this pattern until the keys are found.

Note: the output did not change from version 1.0 to version 2.0, as the bot does not get stuck.