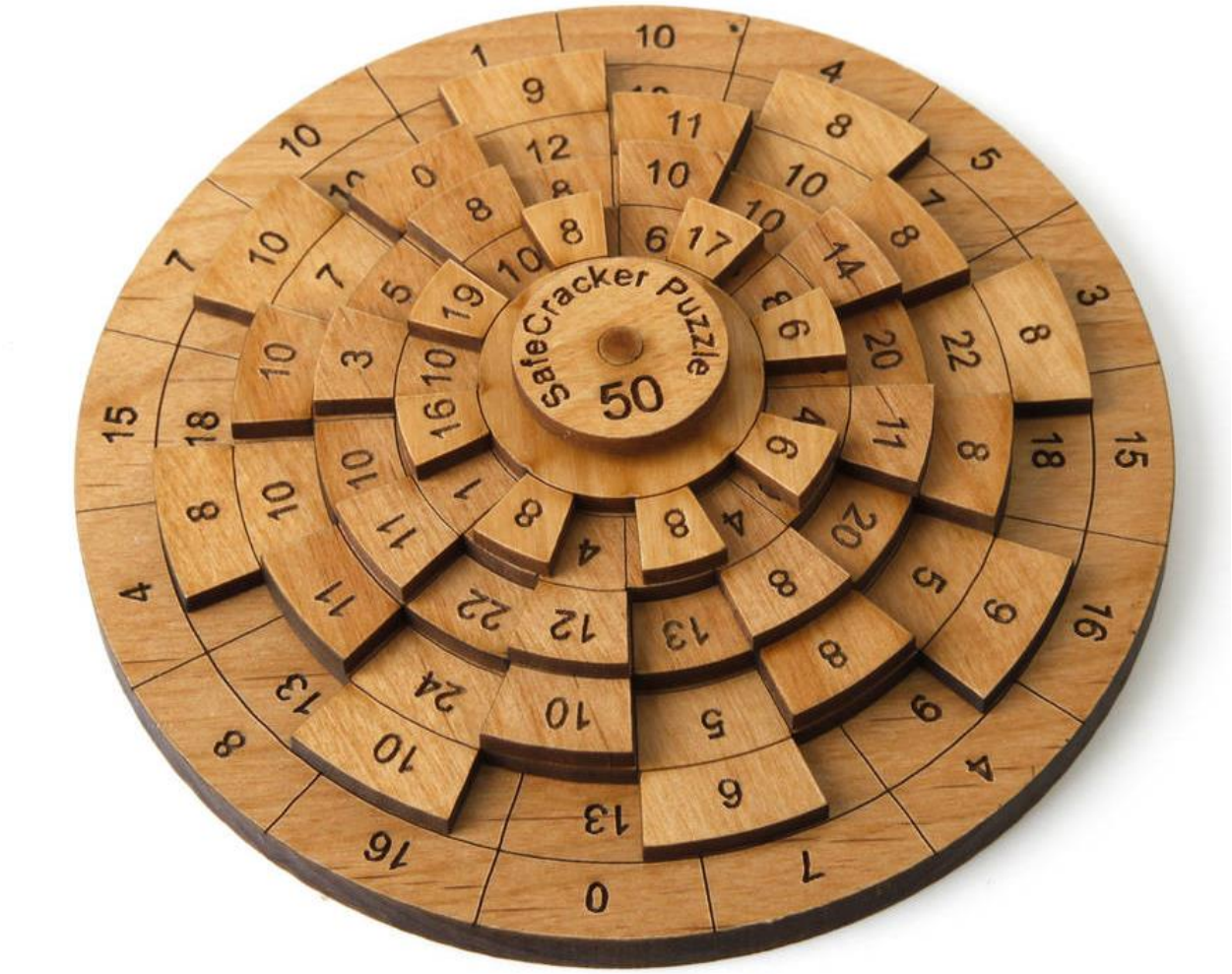
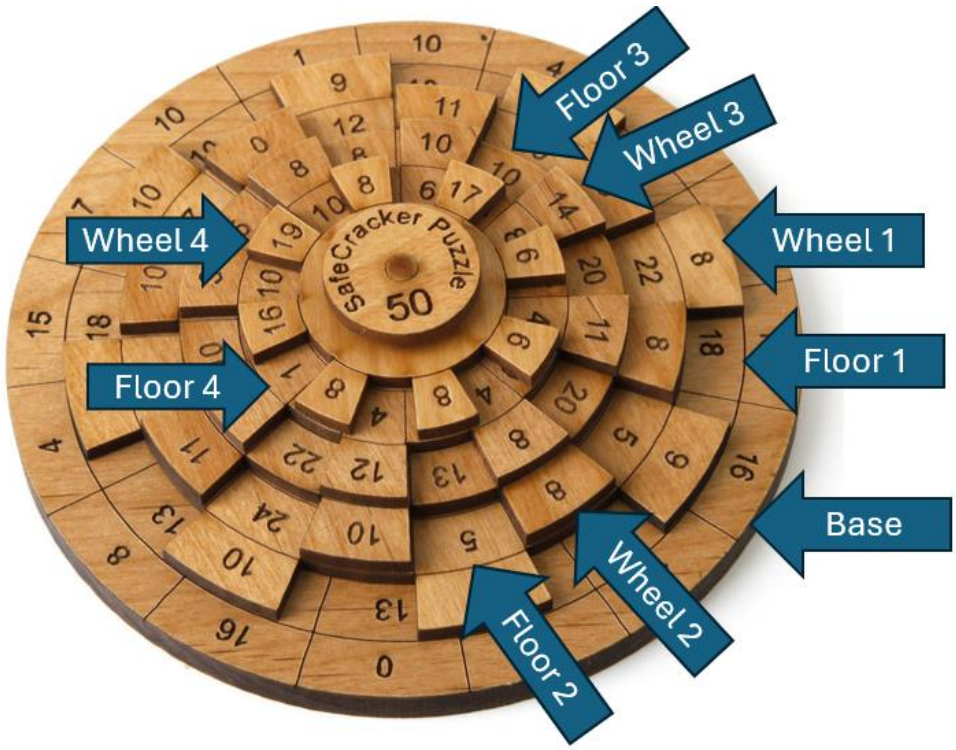
BRHP Safecracker Puzzle interview

Imagine you have a wooden safe cracker puzzle that looked like this:



The goal of the puzzle is to spin each one of the wheels such that every column of the puzzle adds up to exactly 50. With each turn of the wheel some numbers are covered up, while some numbers are revealed. Every wheel is such that every other column will be covered and every other column will be revealed. Only the numbers you can see will be counted, such that every column will have exactly five numbers that are counted toward the sum. The row labeled as *Floor 1* will be covered by *Wheel 1* when there is a value for it, including a 0. Only the *base* layer will always be uncovered.

Base	Floor 1	Wheel 1	Floor 2	Wheel 2	Floor 3	Wheel 3	Floor 4	Wheel 4
3	19		8		8		20	
15	18	6	5	11	19	8	4	17
16	2		1		10		14	
4	9	10	24	8	15	12	4	6
7	27		8		20		5	
0	13	8	10	8	12	11	1	6
16	11		20		20		14	
8	13	10	7	8	13	3	10	8
4	10		20		13		17	
15	18	9	12	10	0	8	10	8
7	10		1		22		5	
10	10	8	10	11	19	10	6	16
1	10		12		10		18	
10	10	8	22	10	0	14	8	19
4	15		0		5		17	
5	7	9	5	0	20	11	4	8



Questions

Suppose you didn't want to solve this puzzle by hand. Please write a script in either python or R to solve this puzzle for you.

1. What is the solution to the puzzle?

2. Please explain your code as you would to one of your coworkers who was trying to replicate it.

3. Please explain your code as you would to a non-technical user who wants to understand how you solved the puzzle.

4. Suppose the non-technical user spends all their time manually solving safe cracker puzzles. They want to know how they could utilize your script to solve any similar puzzle with different numbers. How would you design a workflow that would allow this user to use your script without coding themselves?