

	H2: Medium	20 pt					
	H3: Hard	55 pt					
Туре	Types						
	I1: Easy	20 pt					
	I2: Medium	50 pt					
	I3: Hard	80 pt					
Wan	Wanikani						
	J1: Easy	10 pt					
	J2: Medium	35 pt					
	J3: Hard	45 pt					
Re-enact							
	K1: Easy	15 pt					
	K2: Medium	40 pt					
	K3: Hard	50 pt					
Promotions							
	L1: Easy	5 pt					
	L2: Medium	20 pt					
	L3: Hard	60 pt					

(i) FAQ

My Clarifications

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# Problem H1: ZigZag - Easy

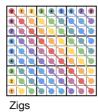
10 points Accepted

**Problem** My Submissions

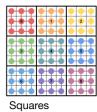
**ZigZag** is a logic-based, combinatorial numberplacement puzzle, similar to Sudoku. The objective is to fill a 9x9 grid so that each zig, zag and square contain all the digits from 0 to 8, inclusive, exactly once.

Zigs are diagonals, running from top left to bottom-right and wrapping around. Zags are diagonals, running from top-right to bottom-left (orthogonal to the zigs) and squares are 3x3 subgrids, similar to Sudoku.

The following diagrams indicate which Zigs, Zags and Squares each cell in a ZigZag belongs to. In the Zigs diagram (left), all the cells in a Zig share a color and are connected by lines to a cell with the Zig's numeric label. The Zags and Squares diagrams are organised similarly:







Note that Zigs and Zags wrap around the grid, so each label appears twice in these diagrams.

Given a list of unfinished ZigZags, provide the sum of all numbers in the top three rows of every grid, after the puzzles have been solved.

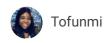
#### Input

The input file format is as follows:

- The first line contains a single integer N, indicating the number of grids to follow.
- Each grid is printed with each of its rows on its own line.
- The "" character indicates an empty cell

## FACEBOOK Coding Competitions

### FB Hack > 2021 > **EMEA Coding** Challenge 2021



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#### Output

Your output should be a file containing a single line with a number that's the sum of all numbers in the top three rows of every grid, after the puzzles have been solved.

#### **Constraints**

$$1 \leq N \leq 100$$

#### **Explanation of Sample**

There are 3 puzzles in the sample. After solving all of them, the sum of the top three rows of all three of them is 324

### Sample Input

### Sample Output

3									
				5	6	8			
8	6		3	2			5		
		0		1				4	
	8	4		6	7			1	
7			5	4					
		3	0	1				6	
	0	8					4		
	1				5	2			
	6							7	
					2		0		
		3						_	
8		4			5	4		7	
2						0	3		
	4			2		8			
			3						
3	7		1		3	8			
2	8			0		7			
6	4	1				1	2	6	
Ĭ	•	_	٠	•	٠	_	_		
		2					0		
				6		6	1	2	
4	0				2	4		5	
3			2				1		
				6		8	7		
		4					6	4	
			0			7			
	8		2	6		2	0	5	
2		0	8	4				8	

_		Ρ.	_		1,	_			
3									324
•	•	•	•	5	6	8	•	•	
8	6	•	3	2	•	•	5	•	
•	•	0		1	•	•	•	4	
•	8	4		6	7	•	•	1	
7			5	4					
•		3	0	1		5		6	
•	0	8	2			1	4		
	1				5	2			
					2		0		
		3						2	
2						0	3		
		1							
		2					0		
							1		
		4							
		9							