

## 不等式 Futoshiki

The purpose of the game is to discover the digits hidden inside the board's cells. Each cell is filled with a digit between 1 and the size of the board. On each row and column each digit appears exactly once.

Example

	A	B	C	D	E
I	3	< 4			<
II	2			3	> 1
III				>	>
IV			> 1	< 5	>
V			1		> 2

Stage 1: Consider row I, only cell (I, E) can place '5'.  
 In row II, only cell (II, B) can place '5'. Hence, cell (II, C) and cell (III, C) are '4' and '5' respectively.  
 Cell (III, D) must be larger than 3 and not '5', so it is '4'.  
 Since each digit appears exactly once on the same row and column, cell (I, D) and cell (III, A) must be '1'.

	A	B	C	D	E
I	3 < 4 >			1 < 5	
II	2	5	4	3 >	1
III	1		5 ^	4 ^	
IV			1 <	5 >	
V		1		2	

Stage 2: Consider column C, each digit appears exactly once on the same row and column, cell (I, C) and cell (IV, C) are '2' and '3' respectively.

According to the inequality signs, cell (III, B) and cell (IV, B) must be '3' and '2'.

Since each digit appears exactly once on the same row and column, cell (IV, A) is not '5', but be '4'.

	A	B	C	D	E
I	3 <	4 >	2	1 <	5
II	2	5	4	3 >	1
III	1	3	5	4 >	
IV	4	2	1 <	5 >	
V		1	3 >	2	

Stage 3:      Fill in the other cells.

	A	B	C	D	E
I	3	< 4 >	2	1	< 5
II	2	5	4	3	> 1
III	1	3	5	> 4	> 2
IV	4	2	> 1	< 5	> 3
V	5	1	3	> 2	4