

瞭望塔 Sentinels

Sentinels is a puzzle game. The objective is to place pillars in appropriate cells such that all numbers of visible range are satisfied.

Rules:

- 1) Cells with number are sentinels. Each number indicate the number of cells can be seen horizontally and vertically from the sentinel (including the cell of sentinel itself)
- 2) Pillars cannot be placed on the cells with numbers;
- 3) Pillars cannot be adjacent to each other horizontally or vertically;
- 4) The grid cannot be divided in to two or above area by the pillars, all spaces can be linked to each other.

Example

5			4	3
8			5	
7		6		3
		8	6	
	5		3	4

Stage 1:

Thinking of cells that pillar must be placed on

- 1) If there is no pillar on the cells of the third row and fourth column, the visible area of the '4' of the first row and fourth column will be larger than 4. Hence there is a pillar.

5			4	3
8			5	
7		6	X	3
		8	6	
	5		3	4

- 2) Consider the visible area of the '4' again, pillar must be placed on the cells of the first row and second column.
- 3) Another pillar has to be placed on the cells of the second row and fifth column.

5	X		4	3
8			5	X
7		6	X	3
		8	6	
	5		3	4

Stage 2:

Thinking of cells that pillar must not be placed on

Consider the '5' at the top left corner, we know that pillars cannot be placed in the first column, so pillar is placed on the cell of the fifth row and third column.

5	X		4	3
8			5	X
7		6	X	3
		8	6	
	5	X	3	4