

數壹 Hitori

Hitori is a puzzle consists of a square grid with numbers appearing in all squares. The objective is to shade some squares according to the rules.

Rules:

- 1) No number in the white squares appears in a row or column more than once.
- 2) Shaded (black) squares do not touch each other vertically or horizontally (can be in diagonal).
- 3) All un-shaded (white) squares create a single continuous area.

Example:

2	2	1	5	3
2	3	1	4	5
1	1	1	3	5
1	3	5	4	2
5	4	3	2	1

2	2	1	5	3
2	3	1	4	5
1	1	1	3	5
1	3	5	4	2
5	4	3	2	1

2	2	1	5	3
2	3	1	4	5
1	1	1	3	5
1	3	5	4	2
5	4	3	2	1

2	2	1	5	3
2	3	1	4	5
1	1	1	3	5
1	3	5	4	2
5	4	3	2	1

Stage 1:

Only one '1' is allowed in the third row, since adjacent shaded (black) squares do not touch each other, the middle '1' must not be shaded.

Similar method is also applied in the third column.

Stage 2:

Consider there are two '2's adjacent to each other in the first row, the '2' not adjacent to shaded cells has to be shaded.

Consider the second column, if the '3' on the top is shaded, nonshaded cells will be separated. Hence the bottom '3' should be shaded.

Stage 3:

There are two '4's and two '5's in the fourth column and fifth column respectively, considering white cells cannot be separated, the lower '4' and the upper '5' are shaded.