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●	2	●	4	5		1	2	3	4	■
6	●	■	9	10		6	7	■	■	10
11	●	13	■	■		11	●	13	14	■
16	17	■	19	20		16	●	18	19	20
21	22	23	24	25		●	22	●	24	25

PROBLEM: *Spot-The-Y* is a game played by 2 players on an N x N grid. The grid squares are numbered as above, with 1 is in the upper left corner, and N^2 is in the lower right corner. Players in turn place a marker (circles for the first player and squares for the second player) in an empty grid space or remove one of their own markers from the grid. The winner is the first player to create a "Y" with his own markers.

A "Y" pattern has two markers adjacent horizontally or vertically, and two other markers diagonally connected to one of the adjacent ones. The grids above show the 4 possible orientations of a "Y" pattern.

INPUT: There will be 10 lines of data with each representing a game of *Spot-The-Y.* Each line will contain an integer, *N*, giving the size of the square grid. That will be followed by a series of integers (1 through N^2), giving the moves of the two players in alternating order. If the move directs a player to a grid square that is empty, that player places his marker in that square. If the grid square contains his marker, it is removed. There will not be any input where the grid square is occupied by an opponent's marker.

OUTPUT: For each game, print the sum of the grid square numbers that produced the first "Y" found. If there is no Y found after all of the moves, print 0.

SAMPLE INPUT:
```
5 1 14 12 18 3 15 7 8
5 1 14 24 20 12 18 3 15 12 20 17 8
6 23 1 21 5 23 8 14 36 16 12 27 7
```

SAMPLE OUTPUT:
1. 23
2. 55
3. 78

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TEST DATA

TEST INPUT:

```
5  8  1  25 24 25 11 8  7  22 19 15 8  22 16 21 3
6  25 21 13 15 20 10 27 1  14 3  32 28 9  36 14 29 22  1
6  36 24 29 22 17 11 29 27 17 27 34 17 23 35 29
8  3  10 46 12 3  13 37 12 54 19 39 27 39 12
8  12 1  19 10 3  17 19 1  5  2  28 19 28 17 20
4  3  5  10 11 10 12 6  10 1  14 13 12 4  14 14 7  9  11 8  2  8  11 13 15
7  10 31 15 23 18 25 16 45 18 30 46 38 24 25 15 25 32 22 10
9  10 20 30 2  4  6  8  3  9  12 15 18 21 24 27 5  25 7  14 11 17 1
10 99 88 80 78 69 97 60 68 99 78 67 68 67 78 68 99
3  1  2  3  4  5  6  7  8  9  8  7  6  5  4  3  2  1  1  3  5  7  8  6  4  2  5  5
```

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PROBLEM（问题）： *Spot-The-Y* 是一款游戏，需要2位玩家在一个 *N* x *N* 的棋盘上进行。如上图所示，棋盘上每个方格都已经标上数字，左上角标1，右下角标 N^2。两位玩家轮流出棋（玩家一使用的是圆棋子，玩家二使用的是方棋子），在这个棋盘上进行摆放或移除自己的棋子。第一个用自己的棋子连成一个 "Y" 字样的玩家即获胜。

组成一个 "Y" 字样需要在水平或垂直方向上有两颗相邻的棋子以及位于其中一颗棋子斜对角方向的另外两颗棋子，这两颗棋子需要分别位于两侧，且中间相隔一个方格。上图已经给出4种方向上可以组成的 "Y" 字样。

INPUT（输入）： 将会有10行数据，每一行都代表一局 *Spot-The-Y.*游戏。每一行中有一个整数*N*，代表的是整个棋盘的尺寸大小。然后后面有若干个整数（1到N²），是两位玩家的棋子轮流落在棋盘上的数字。如果要落棋的方格中没有其他棋子，那么可以在该方格中落棋。如果要落棋的方格已经被自己其他棋子所占，那么移除该格中的棋子。在给出的输入中，不会出现要落棋的方格被对手玩家的棋子所占的情况。

OUTPUT（输出）： 每一局游戏，打印输出最先组成 "Y" 字样的棋子所在方格的数字之和。如果双方棋子移动结束后都没有组成 "Y" 字样，则打印输出0。

SAMPLE INPUT 示例输入:
```
5 1 14 12 18 3 15 7 8
5 1 14 24 20 12 18 3 15 12 20 17 8
6 23 1 21 5 23 8 14 36 16 12 27 7
```

SAMPLE OUTPUT 示例输出:
```
1. 23
2. 55
3. 78
```

American Computer Science League

2020 Finals ● Program 1: Spot the Y ● Junior Division

TEST DATA

TEST INPUT 测试输入:

```
5  8  1  25 24 25 11 8  7  22 19 15 8  22 16 21 3
6  25 21 13 15 20 10 27 1  14 3  32 28 9  36 14 29 22   1
6  36 24 29 22 17 11 29 27 17 27 34 17 23 35 29
8  3  10 46 12 3  13 37 12 54 19 39 27 39 12
8  12 1  19 10 3  17 19 1  5  2  28 19 28 17 20
4  3  5  10 11 10 12 6  10 1  14 13 12 4  14 14 7  9  11 8  2  8  11 13 15
7  10 31 15 23 18 25 16 45 18 30 46 38 24 25 15 25 32 22 10
9  10 20 30 2  4  6  8  3  9  12 15 18 21 24 27 5  25 7  14 11 17 1
10 99 88 80 78 69 97 60 68 99 78 67 68 67 78 68 99
3  1  2  3  4  5  6  7  8  9  8  7  6  5  4  3  2  1  1  3  5  7  8  6  4  2  5  5
```