

The game of Spiral Tap is played on a square grid. Pieces are placed on a grid and the moves are realized according to the position of the grid pieces on the grid. However, the coordinate system in the game of Spiral Tap are a bit different than those found in traditional board games, such as chess.

The cell numbering scheme follows a spiral, starting from the center of the grid in an anti-clockwise fashion. The figure on the right illustrates the cell numbering scheme.

The goal is, given the spiral tap coordinates of a cell, find its cartesian coordinates (line 1 is at the bottom, and column 1 is the leftmost).

5	13	12	11	10	25
4	14	3	2	9	24
3	15	4	1	8	23
2	16	5	6	7	22
1	17	18	19	20	21
	1	2	3	4	5

Input

The input is a series of lines. Each line is composed of two numbers: SZ and P . SZ is the size of the border of the grid and is an odd number no larger than 100000. P is the spiral position of a cell in this grid. The line such that $SZ = P = 0$ marks the end of the input (and is not part of the data set).

Output

For each line in the data set of the input, your program must echo a line 'Line = X , column = Y .', where X and Y are the cartesian coordinates of the corresponding cell.

Sample Input

```
3 1
3 3
3 9
5 9
5 10
0 0
```

Sample Output

```
Line = 2, column = 2.
Line = 3, column = 1.
Line = 3, column = 3.
Line = 4, column = 4.
Line = 5, column = 4.
```