**Goal**

In mathematics, a spiral is a curve which emanates from a point, moving farther away as it revolves around the point.

In this challenge, our spiral will only be made of horizontal or vertical lines. It rotates anti-clockwise. Two points on the spiral cannot be in contact diagonally. A point located on a horizontal line cannot be in contact with a point located on another horizontal line. In the same way, a point located on a vertical line cannot be in contact with a point located on another vertical line.

The aim of this challenge is to draw a spiral of maximum length on a grid containing N rows and **N** columns (with **N** being an odd integer number). To do this, first you have to place a point at the centre of the grid, then you place a point to its left. Then you turn left as soon as it is possible while respecting the constraints set above and without getting out of the grid.

Examples

This might sound a bit complex but should be clearer with a drawing.
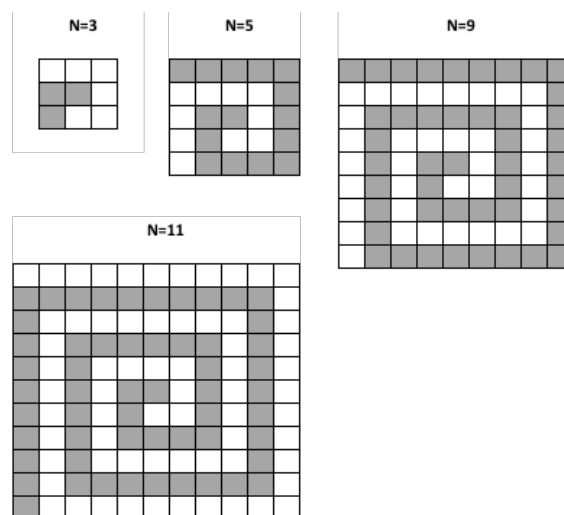
Data

Input

Row *1*: an odd integer number **N** comprised between *3* and *50* representing the size of the spiral (and the size of the grid).

<u>Output</u>

N rows of **N** characters. Each character will be a= to represent an empty point or a # for a point included in the spiral.

If you encounter issues with carriage returns in your output you can also answer with a unique row comprising all the rows of the grid where the rows are separated by a space. For example, if **N**=3 your output would be: === ##= #==

You can download sample input and output data files to work locally by clicking on the link at the bottom of the French version of the question