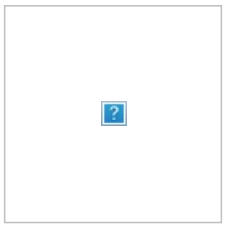
[PI003] - The Slanted Fortress



In the land of Pixeloria, the kingdom is designing a new fortress map. The architects have a special requirement: each fortress blueprint must have a structured layout where the lower right section, from the diagonal to the bottom-right corner, is reinforced with stone walls (#), while the rest remains open space (_).

The engineers are struggling to generate this pattern for different-sized fortresses, so they need your help to automate the process. Your task is to create a program that generates an n×n grid based on this rule.

Input

You are given an integer `n (1 ≤ n ≤ 20)` representing the size of a n×n grid.

Output

Print a n×n grid where:

- The lower-right part of the grid, from the main diagonal (inclusive) downwards, is filled with #.
- The upper-left part of the grid (above the diagonal) is filled with _.

Input/Output Examples

Input 1	Output 1
3	__# _## ###

Input 2	Output 2
5	____# ___## __### _#### #####