A1 – J Box

Print out the J box as shown below.

Input

The first line in the data set will contain the size of the box to be printed. The size is an integer greater than zero.

Output

Print out the J box of the appropriate size as shown below. The boxes are separated by one blank line.

Example

Entrada:
3

Saída:
###
#J#
###

Entrada:
4

Saída:
####
#JJ#
#JJ#
####