2RETO 11 MARATON

To perform work required to implement a program to build a square matrix of size N x N (N odd). The user enters the value of N.

This matrix should be filled with the numbers 10, 11, 12, 13 and so on, starting from the central cell and following the path shown in the figure below.

→	→	→	→	→
↑	→	→	→	↓
↑	↑	→	↓	↓
↑	↑	←	←	↓
↑	←	←	←	←

[SPANISH VERSION](#)

Input

Enter an odd integer.

Output

Matrix with numbers starting in 10, starting from the central cell by following the path defined

Example

Input:

3

Output:
16 17 18
15 10 11
14 13 12

Input:

7

Output:
52 53 54 55 56 57 58
51 30 31 32 33 34 35
50 29 16 17 18 19 36
49 28 15 10 11 20 37
48 27 14 13 12 21 38
47 26 25 24 23 22 39
46 45 44 43 42 41 40