import java.util.Scanner;

import java.lang.Math;

import java.io.printer;

import java.io.collection;

import java.io.scanner;

;

public class SpiralPatternExample2

{

//function to print the spiral pattern

public static void printPattern(int n)

{

//detrmines the boundary size of the array

int size = 2 \* n - 1;

//inner loop

for(int i = 1; i <= size; i++)

{

//outer loop

for(int j = 1; j <= size; j++)

{

//calculates and prints the values for pattern

System.out.print(Math.max(Math.abs(i - n), Math.abs(j - n)) + 1 + " ");

}

System.out.println();

}

}

//driver code

public static void main(String args[])

{

Scanner sc = new Scanner(System.in);

System.out.print("Enter the value of n: ");

int n = sc.nextInt();

System.out.println();

//function calling

printPattern(n);

}

}