### Printing Pattern Using Loops

[**https://www.hackerrank.com/contests/iwd-21-days-of-code/challenges/printing-pattern-2/problem**](https://www.hackerrank.com/contests/iwd-21-days-of-code/challenges/printing-pattern-2/problem)

Print a pattern of numbers from 1 to n as shown below. Each of the numbers is separated by a single space.

                            4 4 4 4 4 4 4

                            4 3 3 3 3 3 4

                            4 3 2 2 2 3 4

                            4 3 2 1 2 3 4

                            4 3 2 2 2 3 4

                            4 3 3 3 3 3 4

                            4 4 4 4 4 4 4

Input Format:

The input will contain a single integer n.

Constraints:

1<=n<=1000

Sample Input 0

2

Sample Output 0

2 2 2

2 1 2

2 2 2

Sample Input 1

5

Sample Output 1

5 5 5 5 5 5 5 5 5

5 4 4 4 4 4 4 4 5

5 4 3 3 3 3 3 4 5

5 4 3 2 2 2 3 4 5

5 4 3 2 1 2 3 4 5

5 4 3 2 2 2 3 4 5

5 4 3 3 3 3 3 4 5

5 4 4 4 4 4 4 4 5

5 5 5 5 5 5 5 5 5

Sample Input 2

7

Sample Output 2

7 7 7 7 7 7 7 7 7 7 7 7 7

7 6 6 6 6 6 6 6 6 6 6 6 7

7 6 5 5 5 5 5 5 5 5 5 6 7

7 6 5 4 4 4 4 4 4 4 5 6 7

7 6 5 4 3 3 3 3 3 4 5 6 7

7 6 5 4 3 2 2 2 3 4 5 6 7

7 6 5 4 3 2 1 2 3 4 5 6 7

7 6 5 4 3 2 2 2 3 4 5 6 7

7 6 5 4 3 3 3 3 3 4 5 6 7

7 6 5 4 4 4 4 4 4 4 5 6 7

7 6 5 5 5 5 5 5 5 5 5 6 7

7 6 6 6 6 6 6 6 6 6 6 6 7

7 7 7 7 7 7 7 7 7 7 7 7 7

**Solution :**

#include <stdio.h>

#include <string.h>

#include <math.h>

#include <stdlib.h>

int main()

{

    int n;

    scanf("%d", &n);

  // Complete the code to print the pattern.

    int size=(2\*n)-1;

    for(int i=0;i<size;i++)

    {

        for(int j=0;j<size;j++)

        {

            int min = i < j ? i : j;

            min = min < size-i ? min : size-i-1;

            min = min < size-j-1 ? min : size-j-1;

            printf("%d ", n-min);

        }

        printf("\n");

    }

    return 0;

}