

<https://course.acciojob.com/idle?question=ee237a54-3d05-4ca7-a888-d119da5e1d3a>

● EASY

● Max Score: 30 Points

Binary Pattern

You have been given an input integer 'N'. Your task is to print the following binary pattern for it.

Pattern for 'N' = 4

The first line contains N 1s. The next line contains $N-1$ 0s. Then the next line contains $N-2$ 1s and so on.

Input Format

The first line of input contains a single integer N .

You need to complete `printPattern` function which contains integer input n and prints/returns the required pattern .

Output Format

Print N lines containing the pattern.

Example 1

Input

3

Output

Explanation

First line contains 3 one's, second line contains 2 zero's and third line contains 1 one.

Example 2

Input

5

Output

Explanation

First line contains 5 one's, second line contains 4 zero's, third line contains 3 one's, fourth line contains 2 zero's and last line contain 1 one.

Constraints

$1 \leq N \leq 10^3$

Topic Tags

- Math
- Loops

My code

```
// n java
import java.util.*;
import java.lang.*;
import java.io.*;

public class Main
{
```

```
public static void main (String[] args) throws
java.lang.Exception
{
    //your code here
    Scanner s=new Scanner(System.in);
    int n=s.nextInt();
    int k=1;
    for(int i=n;i>0;i--){
        for(int j=0;j<i;j++)
        {
            System.out.print(k);
        }
        if(k==0)
            k=1;
        else k=0;
        System.out.print("\n");
    }
}
```