## Prime Triangle

We know that you love math, so we have prepared a very interesting task, that involves both geometry and prime numbers.

By a given **N** number, from which you need to generate a sequence of **1 to N** inclusive. For every prime number in that sequence, you need to print out all the other numbers before it (and the number itself), whether they are prime or not

### **Example**

Let's say **N=10**

* We have the sequence **1, 2, 3, 4, 5, 6, 7, 8, 9, 10**
* The prime numbers are **1, 2, 3, 5, 7** - **5 prime numbers**, so we **prive 5 rows**
* Each row contains all the numbers for **1 to PRIME\_NUMBER**

**Result**:

**1**

**1** **2**

**1** **2** **3**

**1** **2** **3** 4 **5**

**1** **2** **3** 4 **5** 6 **7**

Lets make things simpler:

* Print **0** if the numbers is **not prime**
* Print **1** if the number is **prime**

**Final result**:

1

1 1

1 1 1

1 1 1 0 1

1 1 1 0 1 0 1

### **Input**

* Read from the standard input
* On the single line, find the number **N**

### **Output**

* Print on the standard output
* The output should consist of several lines of digits each of which can be either 1 or 0
  + Without any space between them

### **Sample tests**

#### **Input**

Copy

10

#### **Output**

Copy

1

11

111

11101

1110101

#### **Input**

Copy

27

#### **Output**

Copy

1

11

111

11101

1110101

11101010001

1110101000101

11101010001010001

1110101000101000101

11101010001010001010001

### **Constraints**

* The input data will always be valid and in the format described. There is no need to check it explicitly