Prime Triangle

Java May'19 Advanced Practice 4 - 1 day 01:57:53

Submit solution

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Points: 100 (partial)
Time limit: 0.5s
Memory limit: 32M
Author:
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Tags
Loops
Difficulty
Intermediate

Allowed languages
C#, java, JavaScript

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:

.

Final result:

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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

```
10
```

Copy

Output

```
1
11
111
11101
1110101
```

Copy

Input

```
27
```

Copy

Output

```
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

Clarifications

No clarifications have been made at this time.