

# BlueBook - Sieve

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**Time limit:** 1.0s    **Memory limit:** 16M

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## BlueBook

Given an integer  $N$ , perform the Sieve of Eratosthenes on the integers from 1 to  $N$  inclusive.

## Input Specification

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A single integer  $N$  ( $1 \leq N \leq 500$ ).

## Output Specification

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$N$  lines each containing a single integer. The integer on the  $i^{\text{th}}$  line should be  if  $i$  is prime, or  if it is not a prime.

## Sample Input

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```
9
```

## Sample Output

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```
0
1
1
0
1
0
1
0
0
```