

Problem A. A

Time limit 3000 ms
Mem limit 262144 kB
OS Windows

Given a number N . Print all **prime** numbers between 1 and N inclusive.

A **prime** number is a number that is greater than 1 and has only two factors which are 1 and **itself**.

In other words : **prime number divisible only by 1 and itself**.

Be careful that 1 is not prime .

The first few **prime** numbers are

2 3 5 7 11 13 17
19 23 29 31 37 41
43 47 53 59 61 67
71 73 79 83 89 97

Input

Only one line containing a number N ($2 \leq N \leq 10^3$).

Output

Print all prime numbers between 1 and N (inclusive) separated by a space.

Sample 1

Input	Output
10	2 3 5 7