Problem A. Five, Five Everywhere

Time limit 2000 ms
Mem limit 262144 kB

Problem Statement

Print a sequence $a_1, a_2, ..., a_N$ whose length is N that satisfies the following conditions:

- a_i $(1 \leq i \leq N)$ is a prime number at most $55\,555$.
- The values of $a_1, a_2, ..., a_N$ are all different.
- In every choice of five different integers from $a_1, a_2, ..., a_N$, the sum of those integers is a composite number.

If there are multiple such sequences, printing any of them is accepted.

Notes

An integer N not less than 2 is called a prime number if it cannot be divided evenly by any integers except 1 and N, and called a composite number otherwise.

Constraints

- N is an integer between 5 and 55 (inclusive).

Input

Input is given from Standard Input in the following format:

```
N
```

Output

Print N numbers $a_1, a_2, a_3, ..., a_N$ in a line, with spaces in between.

Sample 1

Input	Output
5	3 5 7 11 31

Let us see if this output actually satisfies the conditions.
First, 3, 5, 7, 11 and 31 are all different, and all of them are prime numbers.
The only way to choose five among them is to choose all of them, whose sum is $a_1 + a_2 + a_3 + a_4 + a_5 = 57$, which is a composite number.

There are also other possible outputs, such as `2 3 5 7 13`, `11 13 17 19 31` and `7 11 5 31 3`.

Sample 2

Input	Output
6	2 3 5 7 11 13

- $2, 3, 5, 7, 11, 13$ are all different prime numbers.
- $2 + 3 + 5 + 7 + 11 = 28$ is a composite number.
- $2 + 3 + 5 + 7 + 13 = 30$ is a composite number.
- $2 + 3 + 5 + 11 + 13 = 34$ is a composite number.
- $2 + 3 + 7 + 11 + 13 = 36$ is a composite number.
- $2 + 5 + 7 + 11 + 13 = 38$ is a composite number.
- $3 + 5 + 7 + 11 + 13 = 39$ is a composite number.

Thus, the sequence `2 3 5 7 11 13` satisfies the conditions.

Sample 3

Input	Output
8	2 5 7 13 19 37 67 79