

Lazy Evaluation

Lazy evaluation is an evaluation strategy that delays the assessment of an expression until its value is needed.

Ruby **2.0** introduced a lazy enumeration feature. Lazy evaluation increases performance by avoiding needless calculations, and it has the ability to create potentially infinite data structures.

Example:

```
power_array = -> (power, array_size) do
  1.upto(Float::INFINITY).lazy.map { |x| x**power }.first(array_size)
end

puts power_array.(2 , 4)  #[1, 4, 9, 16]
puts power_array.(2 , 10) #[1, 4, 9, 16, 25, 36, 49, 64, 81, 100]
puts power_array.(3, 5)  #[1, 8, 27, 64, 125]
```

In this example, **lazy** avoids needless calculations to compute *power_array*. If we remove lazy from the above code, then our code would try to compute all *x* ranging from **1** to *Float::INFINITY*. To avoid timeouts and memory allocation exceptions, we use **lazy**. Now, our code will only compute up to *first(array_size)*.

Task

Your task is to print an array of the first *N* palindromic prime numbers. For example, the first **10** palindromic prime numbers are **[2, 3, 5, 7, 11, 101, 131, 151, 181, 191]**.

Input Format

A single line of input containing the integer *N*.

Constraints

You are not given how big *N* is.

Output Format

Print an array of the first *N* palindromic primes.

Sample Input

```
5
```

Sample Output

```
[2, 3, 5, 7, 11]
```