## 1 Description of the used algorithm

Sieve of Eratosthenes is used to find all prime numbers below certain limit Lets call this limit n

It starts with number 2, which is the first prime number and marks all multiplies of this number (up to predefined limit) as not prime, those numbers will be later ignored

Then it takes next available number (3) and does the same thing

This is repeated until there are no more numbers below the limit which are neither prime nor crossed out

Then we return the list of all non-crossed out (prime) numbers

We used more optimized version of this algorithm and check only up to  $\sqrt{n}$ 

## 2 Functional description of the application

- 2.1 Input data format
- 2.2 Output text on console
- 2.3 Format of output data
- 3 Description of designed code structure
- 3.1 Own implementation tests

Comments

## 3.2 Reference tests

Source of reference values

Comparision with our implementation

Comments

## 4 Tests