

PRIME NUMBERS

CHALLENGE DESCRIPTION:

Print out the prime numbers less than a given number N. For bonus points your solution should run in $N \cdot (\log(N))$ time or better. You may assume that N is always a positive integer.

INPUT SAMPLE:

Your program should accept as its first argument a path to a filename. Each line in this file is one test case. Each test case will contain an integer $n < 4,294,967,295$. E.g.

```
10
20
100
```

OUTPUT SAMPLE:

For each line of input, print out the prime numbers less than N, in ascending order, comma delimited. (There should not be any spaces between the comma and numbers) E.g.

```
2,3,5,7
2,3,5,7,11,13,17,19
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
```