

# PrimeNumbers Pseudocode

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## PrimeNumbers

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**Algorithm: PrimeNumbers(X)**

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*Input: X, where X is a positive long integer.*

*Output: Primes[], N, where Primes is an array of prime numbers less than X, and N is the length of Primes.*

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01 ~Primes  $\leftarrow$  []
02 ~counter  $\leftarrow$  2
03 ~While counter  $\leq$  X
04 ~~~~~isPrime  $\leftarrow$  True
05 ~~~~~For i from 2 to X
06 ~~~~~~If mod(counter,i)==0 and (counter not equal to i)
07 ~~~~~~isPrime  $\leftarrow$  False
09 ~~~~~~break
10 ~~~~~If isPrime
11 ~~~~~~add counter into Primes
12 ~~~~~counter  $\leftarrow$  counter+1
13 ~N  $\leftarrow$  size of Primes
14 ~Return Primes and N
```

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