# # Sieve of Eratosthenes

Given a number n, print all primes smaller than or equal to n.

Following is the algorithm to find all the prime numbers less than or equal to a given integer n by Eratosthenes’ method:

1. Create a list of consecutive integers from 2 to n: (2, 3, 4, …, n).
2. Initially, let p equal 2, the first prime number.
3. Starting from p, count up in increments of p and mark each of these numbers. These numbers will be p, 2\*p, 3\*p etc..
4. Find the first number greater than p in the list that is not marked. If there was no such number, stop. Otherwise, let p now equal this number (which is the next prime), and repeat from step 3

**Time complexity :**O(n\*log(log(n)))

Code:

<https://ide.codingblocks.com/s/123229>