## Project 1

Write a java program to compute all prime numbers less than equal to a given integer N using the algorithm "Sieve of Erotosthenes".

The Sieve of Eratosthenes is a method used to compute all primes less than equal to N. We begin by making a table of integers 2 to N. We find the smallest integer, i that is not crossed out, print i, and cross out 2i, 3i, ... ..( actually better to start at  $i^2$  and use increments  $i^2 + i$ ,  $i^2 + 2i$ ,  $i^2 + 3i$ ,... etc until N). When i is  $> \sqrt{N}$ , the algorithm terminates.

Prompt the user to give an positive integer value N and print all primes up till N using the above algorithm on screen.