class Solution {

public int countPrimes(int n) {

if(n <= 2) return 0; //Checking 0 & 1

boolean[] composites = new boolean[n];

int limit = (int)Math.sqrt(n);

//Array of compoites --> True represent composite and False represents primes

for(int i = 2; i <= limit; i++){

if(composites[i] == false) {

//Mark all the multiples of i as true.

//The first index to be flipped to true, is i\*i

for(int j = i\*i; j < n; j+=i){

composites[j] = true;

}

}

}

int count = 0;

for(int i = 2; i < n; i++) {

if(composites[i] == false) count++;

}

return count;

}

}