204. Count Primes

Solved

Medium

Topics

Companies

Hint

Given an integer n, return the number of prime numbers that are strictly less than n.

Example 1:

Input: n = 10

Output: 4

Explanation: There are 4 prime numbers less than 10, they are 2, 3, 5, 7.

Example 2:

Input: n = 0

Output: 0

Example 3:

Input: n = 1

Output: 0

Constraints:

0 <= n <= 5 \* 106

Code:

class Solution {

public int countPrimes(int n) {

if(n<2){

return 0 ;

}

boolean isPrime[] = new boolean[n+1];

Arrays.fill(isPrime , true);

isPrime[0] = false;

isPrime[1] = false;

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

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

isPrime[j] = false;

}

}

int count=0;

for(int i=0;i<n;i++){

if(isPrime[i]==true){

count++;

}

}

return count;

}

}