

Problem 204: Count Primes

Problem Information

Difficulty: Medium

Acceptance Rate: 35.48%

Paid Only: No

Tags: Array, Math, Enumeration, Number Theory

Problem Description

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:

$0 \leq n \leq 5 \times 10^6$

Code Snippets

C++:

```
class Solution {  
public:
```

```
int countPrimes(int n) {  
  
}  
};
```

Java:

```
class Solution {  
    public int countPrimes(int n) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def countPrimes(self, n: int) -> int:
```