

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 <= n <= 5 * 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:
```