

Count Squares

Consider a sample space S consisting of all perfect squares starting from 1, 4, 9 and so on. You are given a number N , you have to output the number of integers less than N in the sample space S .

Example 1:

Input :

$N = 9$

Output:

2

Explanation:

1 and 4 are the only Perfect Squares less than 9. So, the Output is 2.

```
def countSquares(self, N):  
    # code here  
    start = 1  
    end = N  
    ans = 0  
    while start <= end:  
        mid = (end + start) // 2  
        if mid * mid == N:  
            return mid - 1  
        elif mid * mid > N:  
            end = mid - 1  
        elif mid * mid < N:  
            ans = mid  
            start = mid + 1  
    return ans
```