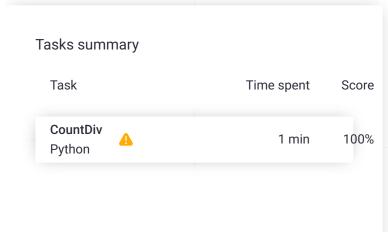
Codility_

CodeCheck Report: trainingKAFNXC-5R3

Test Name:

Check out Codility training tasks

Summary Timeline





Tasks Details

1. CountDiv

Compute number of integers divisible by k in range

Task Score

Correctness

100%

Performance

100%

100%

Task description

[a..b].

Write a function:

def solution(A, B, K)

that, given three integers A, B and K, returns the number of integers within the range [A..B] that are divisible by K, i.e.:

 $\{i: A \le i \le B, i \mod K = 0\}$

For example, for A = 6, B = 11 and K = 2, your function should return 3, because there are three numbers

Solution

Programming language used: Python

Total time used: 1 minutes 2

Effective time used: 1 minutes ②

Notes: not defined yet

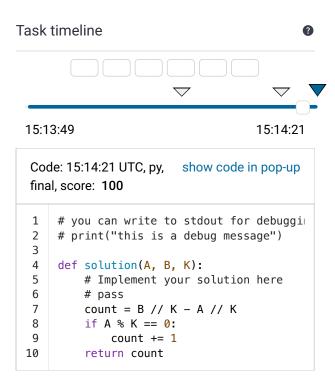
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divisible by 2 within the range [6..11], namely 6, 8 and 10.

Write an **efficient** algorithm for the following assumptions:

- A and B are integers within the range [0..2,000,000,000];
- K is an integer within the range [1..2,000,000,000];
- A ≤ B

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Analysis summary

The solution obtained perfect score.

Analysis

Detected time complexity: O(1)

ехр	and all	Example	tests	
	example		✓ OK	
	A = 6, B = 1	1, K = 2		
ехр	and all	Correctnes	ss tests	
>	simple		✓ OK	
	A = 11, B = 3	345, K = 17		
	minimal		✓ OK	
	A = B in {0,1}, K = 11			
>	extreme_	ifempty	✓ OK	
	A = 10, B =	10, K in {5,7,20}		
>	extreme_endpoints		✓ OK	
	verify handl	ing of range		
	endpoints, r	nultiple runs		
ехр	and all	Performan	ce tests	
	big_value	S	✓ OK	
	A = 100, B=	123M+, K=2		
	big_value	s2	✓ OK	
	A = 101, B =	123M+, K = 10K		
	big_value	· 3	✓ OK	

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A = 0, B = MAXINT, K in
{1,MAXINT}

▶ big_values4

A, B, K in {1,MAXINT}

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