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PAINLESS

CountDiv

START

Compute number of integers divisible by k in range [a..b].

Programming language: C++ ▼

Write a function:

```
int solution(int A, int B, int 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.:

$$\{ i : A \leq i \leq B, i \bmod K = 0 \}$$

For example, for A = 6, B = 11 and K = 2, your function should return 3, because there are three numbers divisible by 2 within the range [6..11], namely 6, 8 and 10.

Assume that:

- 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];
- $A \leq B$.

Complexity:

- expected worst-case time complexity is $O(1)$;
- expected worst-case space complexity is $O(1)$.

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