



ining center

out Codility training tasks

Demo ticket

Session

ID: demoBW9FZV-A2E **Time limit:** 120 min.

Status: closed

Created on: 2014-12-11 10:14 UTC Started on: 2014-12-11 10:15 UTC Finished on: 2014-12-11 10:27 UTC

Tasks in test

1 | := FrogJmp

Correctness

100%

Performance

100%

Task score

100%

Programming language used: Ruby

41

100%

Test score

100 out of 100 points

score: 100 of 100

ASY

1. FrogJmp

Task description

Count minimal number of jumps from position X to Y.

Solution

A small frog wants to get to the other side of the road. The frog is currently located at position X and wants to get to a position greater than or equal to Y. The small frog always jumps a fixed distance, D. Count the minimal number of jumps that the small frog must perform to reach its target.

Write a function:

def solution(x, y, d)

that, given three integers X, Y and D, returns the minimal number of jumps from position X to a position equal to or greater than Y. For example, given:

- X = 10
- Y = 85
- D = 30

the function should return 3, because the frog will be positioned as follows:

- after the first jump, at position 10 + 30 = 40
- after the second jump, at position 10 + 30 + 30 = 70
- after the third jump, at position 10 + 30 + 30 + 30 = 100

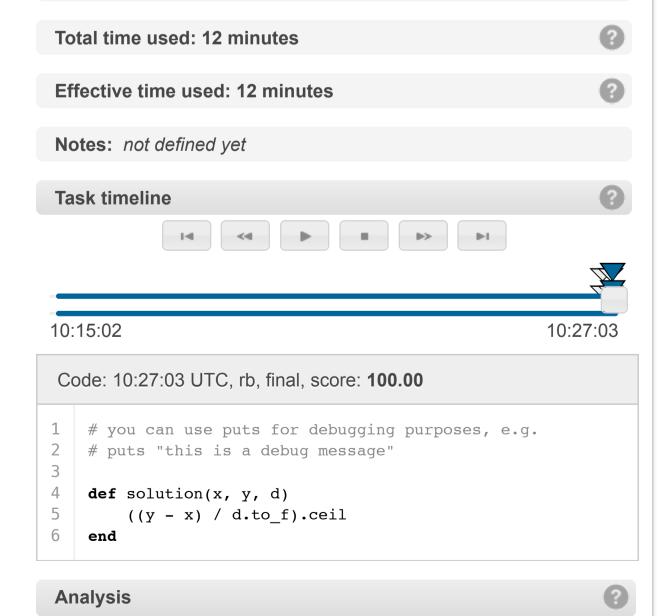
Assume that:

- X, Y and D are integers within the range [1..1,000,000,000];
- X ≤ Y.

Complexity:

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

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Detected time complexity:

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toot	time	Toodit
Example tests		
example example test	0.064 s	ок
Correctness tests		
simple1 simple test	0.056 s	OK
simple2	0.060 s	ОК
extreme_position no jump needed	0.056 s	ок
small_extreme_jump one big jump	0.060 s	OK
Performance tests		
many_jump1 many jumps, D = 2	0.064 s	OK
many_jump2 many jumps, D = 99	0.056 s	OK
many_jump3 many jumps, D = 1283	0.060 s	OK
big_extreme_jump maximal number of jumps	0.056 s	ок
small_jumps many small jumps	0.064 s	ОК

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