

BACK

Phone Call



DESCRIPTION

SOLUTIONS 23774

COMMENTS 29



CODEWRITING

SCORE: 300/300

Some phone usage rate may be described as follows:

- first minute of a call costs `min1` cents,
- each minute from the 2nd up to 10th (inclusive) costs `min2_10` cents
- each minute after 10th costs `min11` cents.

You have `s` cents on your account before the call. What is the duration of the longest call (in minutes rounded down to the nearest integer) you can have?

Example

For `min1 = 3`, `min2_10 = 1`, `min11 = 2` and `s = 20`, the output should be
`phoneCall(min1, min2_10, min11, s) = 14`.

Here's why:

- the first minute costs `3` cents, which leaves you with $20 - 3 = 17$ cents;
- the total cost of minutes `2` through `10` is $1 * 9 = 9$, so you can talk `9` more minutes and still have $17 - 9 = 8$ cents;
- each next minute costs `2` cents, which means that you can talk $8 / 2 = 4$ more minutes.

Thus, the longest call you can make is $1 + 9 + 4 = 14$ minutes long.

Input/Output

- [execution time limit] 4 seconds (js)
- [input] integer `min1`

Guaranteed constraints:

$1 \leq \text{min1} \leq 10$.

- [input] integer `min2_10`

Guaranteed constraints:

$1 \leq \text{min2_10} \leq 10$.

- [input] integer `min11`

Guaranteed constraints:

