

Problem:

You are given a chain of digits. The first element of the chain is the initial offset. Your task is to calculate the total offset, where offset is the sum of differences between two consecutive digits.

Example

For chain = "14839", the output should be

`offsets(chain) = 6`.

The total offset is calculated as follows:

$$1 + ((8 - 4) + (3 - 8) + (9 - 3)) = 1 + (4 - 5 + 6) = 6.$$

Input/Output

- **[time limit] 3000ms (java)**

- **[input] string chain**

A string of digits.

Constraints:

$$5 \leq \text{chain.length} \leq 1000.$$

- **[output] integer**

The total offset.

Solution:

1.- Convert the first char of String "chain" to int , and add it to a result variable

2.- Iterate the chars of "chain" in reverse order from last to the third character of "chain"

For every iteration , convert `charAt(i-1)` and `charAt(i)` to int , calculate its difference , and add it to result

3.- return result