BACK absoluteValuesSumMinimization

DESCRIPTION SOLUTIONS 9162 COMMENTS 83 CODEWRITING SCORE: 300/300

Given a sorted array of integers `a`, find an integer `x` from `a` such that the value of

```
abs(a[0] - x) + abs(a[1] - x) + ... + abs(a[a.length - 1] - x)
```

is the *smallest possible* (here `abs` denotes the absolute value).
If there are several possible answers, output the *smallest* one.

Example

For `a = [2, 4, 7]`, the output should be
`absoluteValuesSumMinimization(a) = 4`.

Input/Output

- **[execution time limit] 4 seconds (js)**
- **[input] array.integer a**

  A non-empty array of integers, sorted in ascending order.

  Guaranteed constraints:
  $1 \le a.length \le 200$,
  $-10^6 \le a[i] \le 10^6$.

- **[output] integer**

[JavaScript (ES6)] Syntax Tips

```
// Prints help message to the console
// Returns a string
function helloWorld(name) {
    console.log("This prints to the console when you Run Tests");
    return "Hello, " + name;
}
```