BACK

Numbers Grouping



V

DESCRIPTION

SOLUTIONS 241

COMMENTS 11

README

CODEWRITING SCORE: 300/300

You are given an array of integers that you want distribute between several groups. The first group should contain numbers from 1 to 10^4 , the second should contain those from $10^4 + 1$ to $2 * 10^4$, ..., the 100^{th} one should contain numbers from $99 * 10^4 + 1$ to 10^6 and so on.

All the numbers will then be written down in groups to the text file in such a way that:

- the groups go one after another;
- each non-empty group has a header which occupies one line;
- each number in a group occupies one line.

Calculate how many lines the resulting text file will have.

Example

```
For a = [20000, 239, 10001, 999999, 10000, 20566, 29999], the output should be numbersGrouping(a) = 11.
```

The numbers can be divided into 4 groups:

```
    239 and 10000 go to the 1<sup>st</sup> group (1 ... 10<sup>4</sup>);
```

- 10001 and 20000 go to the second 2^{nd} ($10^4 + 1 \dots 2 * 10^4$);
- 20566 and 29999 go to the 3^{rd} group ($2 * 10^4 + 1 \dots 3 * 10^4$);
- groups from 4 to 99 are empty;
- 999999 goes to the 100^{th} group (99 * 10^4 + 1 ... 10^6).

Thus, there will be 4 groups (i.e. four headers) and 7 numbers, so the file will occupy 4 + 7 = 11 lines.

Input/Output

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

```
Guaranteed constraints:

1 \le a.length \le 10^5,

1 \le a[i] \le 10^9.
```

• [output] integer

The number of lines needed to store the grouped numbers.

[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;
}
```