BACK

Digit Difference Sort

177,554

DESCRIPTION | MY SOLUTIONS | LEADERBOARD | COMMENTS | README

CODEWRITING SCORE: 300/300

Given an array of integers, sort its elements by the *difference* of their largest and smallest digits. In the case of a tie, that with the larger index in the array should come first.

Example

For `a = [152, 23, 7, 887, 243]`, the output should be
`digitDifferenceSort(a) = [7, 887, 23, 243, 152]`.

Here are the *differences* of all the numbers:

- `152`: `difference = 5 - 1 = 4`;
- `23`: `difference = 3 - 2 = 1`;
- `7`: `difference = 7 - 7 = 0`;
- `887`: `difference = 8 - 7 = 1`;
- `243`: `difference = 4 - 2 = 2`.

`23` and `887` have the same *difference*, but `887` goes after `23` in `a`, so in the sorted array it comes first.

Input/Output

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

  An array of integers.

  Guaranteed constraints:
  $0 \le sequence.length \le 10^4$,
  $1 \le sequence[i] \le 10^5$.

- **[output] array.integer**

  Array `a` sorted as described above.

[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;
}
```