BACK

Unique Digit Products

177,554

DESCRIPTION | MY SOLUTIONS | LEADERBOARD | COMMENTS | README

CODEWRITING SCORE: 300/300

Let's call `product(x)` the product of `x`'s digits. Given an array of integers `a`, calculate `product(x)` for each `x` in `a`, and return the number of distinct results you get.

Example

For `a = [2, 8, 121, 42, 222, 23]`, the output should be
`uniqueDigitProducts(a) = 3`.

Here are the products of the array's elements:

- `2`: `product(2) = 2`;
- `8`: `product(8) = 8`;
- `121`: `product(121) = 1 * 2 * 1 = 2`;
- `42`: `product(42) = 4 * 2 = 8`;
- `222`: `product(222) = 2 * 2 * 2 = 8`;
- `23`: `product(23) = 2 * 3 = 6`.

As you can see, there are only `3` different products: `2`, `6` and `8`.

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 different digit products in `a`.

[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;
}
```