


BACK

Number of Clans

 199,304

▼

DESCRIPTION

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README

CODEWRITING

SCORE: 300/300

Let's call two integers A and B *friends* if each integer from the array `divisors` is either a divisor of both A and B or neither A nor B . If two integers are *friends*, they are said to be in the same *clan*. How many clans are the integers from 1 to k , inclusive, broken into?

Example

For `divisors = [2, 3]` and $k = 6$, the output should be `numberOfClans(divisors, k) = 4`.

The numbers 1 and 5 are friends and form a *clan*, 2 and 4 are friends and form a *clan*, and 3 and 6 do not have friends and each is a *clan* by itself. So the numbers 1 through 6 are broken into 4 clans.

Input/Output

- **[execution time limit] 4 seconds (js)**

- **[input] array.integer divisors**

A non-empty array of positive integers.

Guaranteed constraints:

$2 \leq \text{divisors.length} < 10$,
 $1 \leq \text{divisors}[i] \leq 10$.

- **[input] integer k**

A positive integer.

Guaranteed constraints:

$5 \leq k \leq 10$.

- **[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;
}
```