

6192. Number of Common Factors

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Given two positive integers *a* and *b*, return the number of **common** factors of *a* and *b*.

An integer *x* is a **common factor** of *a* and *b* if *x* divides both *a* and *b*.

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Easy

Example 1:

Input: *a* = 12, *b* = 6
Output: 4
Explanation: The common factors of 12 and 6 are 1, 2, 3, 6.

Example 2:

Input: *a* = 25, *b* = 30
Output: 2
Explanation: The common factors of 25 and 30 are 1, 5.

Constraints:

- 1 <= *a*, *b* <= 1000

JavaScript

📄 ↺ ⚙

```
1 const commonFactors = (a, b) => {
2   let fa = findAllFactors(a), fb = findAllFactors(b), res = 0;
3   for (const x of fa) {
4     if (fb.has(x)) res++;
5   }
6   return res;
7 };
8
9 const findAllFactors = (n) => {
10  let res = new Set();
11  for (let i = 1; i * i <= n; i++) {
12    if (n % i == 0) {
13      if (i == n / i) {
14        res.add(i);
15      } else {
16        res.add(i);
17        res.add(n / i);
18      }
19    }
20  }
21  return res;
22 };
```

☐ Custom Testcase

Use Example Testcases

Run

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Submission Result: **Accepted** (/submissions/detail/813150540/) ⓘ

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