Amazon Spring '23 High ... Premium 0

Description Editorial Solutions (1.8K) Submissions

# 1492. The kth Factor of n

Hint

Medium 1.5K 270

Companies

You are given two positive integers `n` and `k`. A factor of an integer `n` is defined as an integer `i` where `n % i == 0`.

Consider a list of all factors of `n` sorted in **ascending order**, return *the* `k^th` *factor* in this list or return `-1` if `n` has less than `k` factors.

**Example 1:**

> **Input:** n = 12, k = 3
> **Output:** 3
> **Explanation:** Factors list is [1, 2, 3, 4, 6, 12], the 3rd factor is 3.

**Example 2:**

> **Input:** n = 7, k = 2
> **Output:** 7
> **Explanation:** Factors list is [1, 7], the 2nd factor is 7.

**Example 3:**

> **Input:** n = 4, k = 4
> **Output:** -1
> **Explanation:** Factors list is [1, 2, 4], there is only 3 factors.

Java Auto

```java
class Solution {
    public int kthFactor(int n, int k) {
        ArrayList<Integer> factorsList = factors( n);
        System.out.println(factorsList);
        if( factorsList.size()>=k ){
            return factorsList.get(k-1);
        }
        else{
            return -1;
        }

    }

    private ArrayList<Integer> factors( int n ){
        ArrayList<Integer> factorsList = new ArrayList<>();

        for( int i = 1; i <= n; i++ ){
            if( n % i == 0 ){
                factorsList.add(i);
            }
        }
```

--NORMAL-- Ln 26, Col 2

Testcase Result

Accepted Runtime: 0 ms

Case 1 Case 2 Case 3

Input

Console Run Submit