1492. The kth Factor of n

Medium 574 187 Add to List Share

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. We should return -1.
```

Constraints:

- `1 <= k <= n <= 1000`

Accepted 72,917 Submissions 117,157

Seen this question in a real interview before? Yes No

```
1  public class Solution {
2      public int KthFacto
int k) {
3          var factors = n
List<int>() {1};
4
5          var start = 2;
6          if( n %2 == 1)
7          {
8              start = 3;
9          }
10
11         for(var i = sta
n; i++)
12         {
13             if(n % i ==
14             {
15                 factors
16             }
17             if(factors.
k)
18             {
19                 break;
20             }
21         }
22         return factors.
? factors[k-1] : -1;
23     }
24 }
```

Testcase Run Code Result

Accepted Runtime: 56 ms

Your input
12
3

Output 3

Expected 3

Console Use Example Testcase