Answer: (penalty regime: 0 %)

Reset answer

```c
/*
 * Complete the 'fourthBit' function belo
 *
 * The function is expected to return an
 * The function accepts INTEGER number as
 */

int fourthBit(int number)
{
    int binary[32];
    int i=0;
    while(number>0)
    {
        binary[i]=number%2;
        number/=2;
        i++;
    }
    if(i>=4)
    {
        return binary[3];
    }
    else
    return 0;

}
```

	Test	Expected	Got	
✓	printf("%d", fourthBit(32))	0	0	
✓	printf("%d", fourthBit(77))	1	1	

Passed all tests! ✓

Determine the factors of a number (i.e., all positive integer values that evenly divide into a number) and then return the pth element of the list, sorted ascending. If there is no p^{th} element, return 0.

Example

n = 20

p = 3

The factors of 20 in ascending order are {1, 2, 4, 5, 10, 20}. Using 1-based indexing, if p = 3, then 4 is returned. If p > 6, 0 would be returned.

Function Description

Complete the function pthFactor in the editor below.

pthFactor has the following parameter(s):

int n: the integer whose factors are to be found

int p: the index of the factor to be returned

Returns:

int: the long integer value of the pth integer factor of n or, if there is no factor at that index, then 0 is returned

Constraints

$1 \leq n \leq 10^{15}$

$1 \leq p \leq 10^{9}$

Input Format for Custom Testing

Input from stdin will be processed as follows and passed to the function.

The first line contains an integer n, the number to factor.

The second line contains an integer p, the 1-based index of the factor to return.

Sample Case 0

Factoring n = 10 results in {1, 2, 5, 10}. Return the p = 3rd factor, 5, as the answer.

Sample Case 1

Sample Input 1

```
STDIN    Function
-----    --------
10    →   n = 10
5     →   p = 5
```

Sample Output 1

```
0
```

Explanation 1

Factoring n = 10 results in {1, 2, 5, 10}. There are only 4 factors and p = 5, therefore 0 is returned as the answer.

Sample Case 2

Sample Input 2

```
STDIN    Function
-----    --------
1     →   n = 1
1     →   p = 1
```

Sample Output 2

```
1
```

Explanation 2

Factoring n = 1 results in {1}. The p = 1st factor of 1 is returned as the answer.

Answer: (penalty regime: 0 %)

Reset answer

```c
/*
 * Complete the 'pthFactor' function belo
 *
 * The function is expected to return a L
 * The function accepts following paramet
 *  1. LONG_INTEGER n
 *  2. LONG_INTEGER p
 */

long pthFactor(long n, long p)
{
    int count=0;
    for(long i=1;i<=n;i++)
    {
        if(n%i==0)
        {
            count++;
            if(count==p)
            {
                return i;
            }
        }
    }
    return 0;
}
```

	Test	Expected	G
✓	printf("%ld", pthFactor(10, 3))	5	5
✓	printf("%ld", pthFactor(10, 5))	0	0
✓	printf("%ld", pthFactor(1, 1))	1	1

Passed all tests! ✓

Finish review