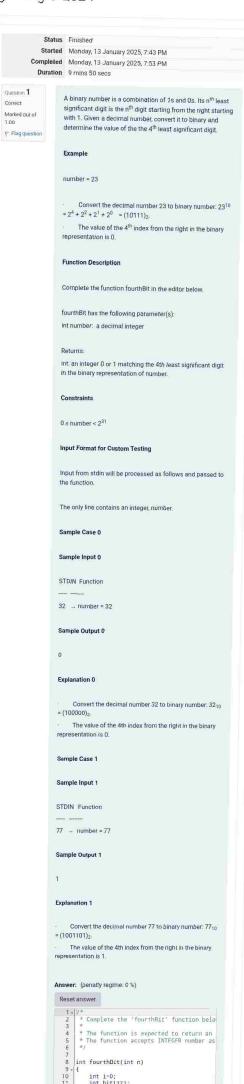
REC-(

# GE23131-Programming Using C-2024





#### Sample Output 1

1

#### Explanation 1

- Convert the decimal number 77 to binary number: 77<sub>10</sub> = (1001101)<sub>2</sub>.
- $\dot{}$  . The value of the 4th index from the right in the binary representation is 1.

#### Answer: (penalty regime: 0 %)

```
Reset answer
        * Complete the 'fourthBit' function below
       * The function is expected to return an * The function accepts INTEGER number as
  4
      int fourthBit(int n)
  8
           int i=0;
int bit[32];
 10
 11
           while(n>0){
 13
14
                 bit[i]=n%2;
 15
16
17
                n/=2;
i++;
 18
            if(i>=4){
 19
                return bit[3];
 20
21
 22
            else
 23
24
            return 0;
```

	Test	Expected	Got	
V	printf("%d", fourthBit(32))	0	٥	4
~	printf("%d", fourthBit(77))	î	1	,

Question 2
Correct
Marked out of 1,00

F Flag question

Determine the factors of a number (i.e., all positive integer values that evenly divide into a number) and then return the  $p^{th}$  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  $p^{th}$  integer factor of n or, if there is no factor at that index, then 0 is returned

## Constraints

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

#### Jampie Guoc 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 %)

	Test	Expected	G
/	printf("%ld", pthFactor(10, 3))	5	5
~	<pre>printf("%ld", pthFactor(10, 5))</pre>	0	0
~	printf("%ld", pthFactor(1, 1))	T.	1

Finish review