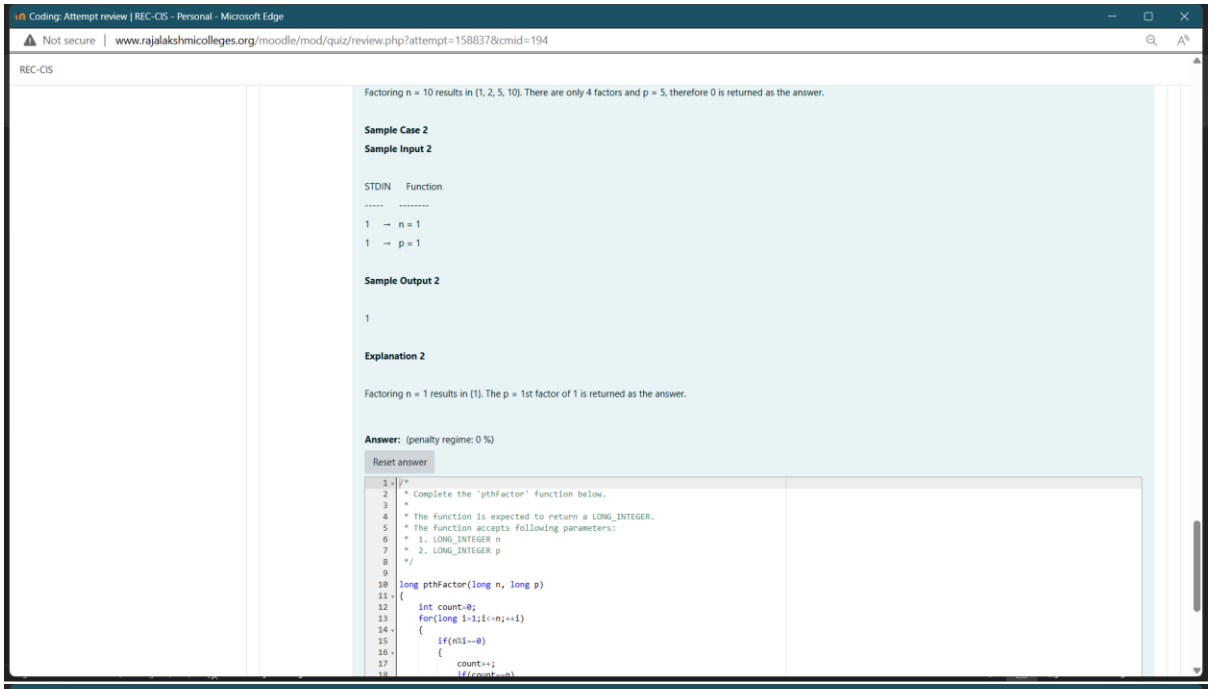
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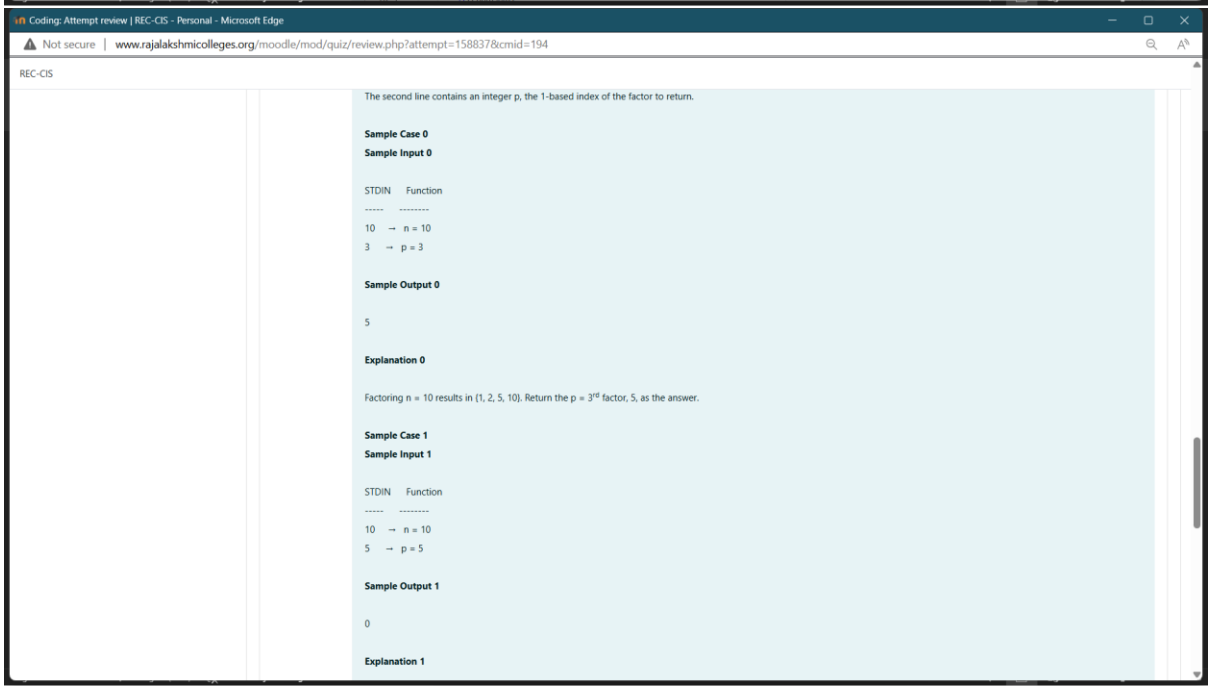
REC-CIS
Factoring n = 10 results in {1, 2, 5, 10}. There are only 4 factors and p = 5, therefore 0 is returned as the answer.
Sample Case 2
Sample Input 2
STDIN Function
----- --------
1 → n = 1
1 → p = 1
Sample Output 2
1
Explanation 2
Factoring n = 1 results in {1}. The p = 1st factor of 1 is returned as the answer.
Answer: (penalty regime: 0 %)
Reset answer
/*
* Complete the 'pthFactor' function below.
*
* The function is expected to return a LONG_INTEGER.
* The function accepts following parameters:
* 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++;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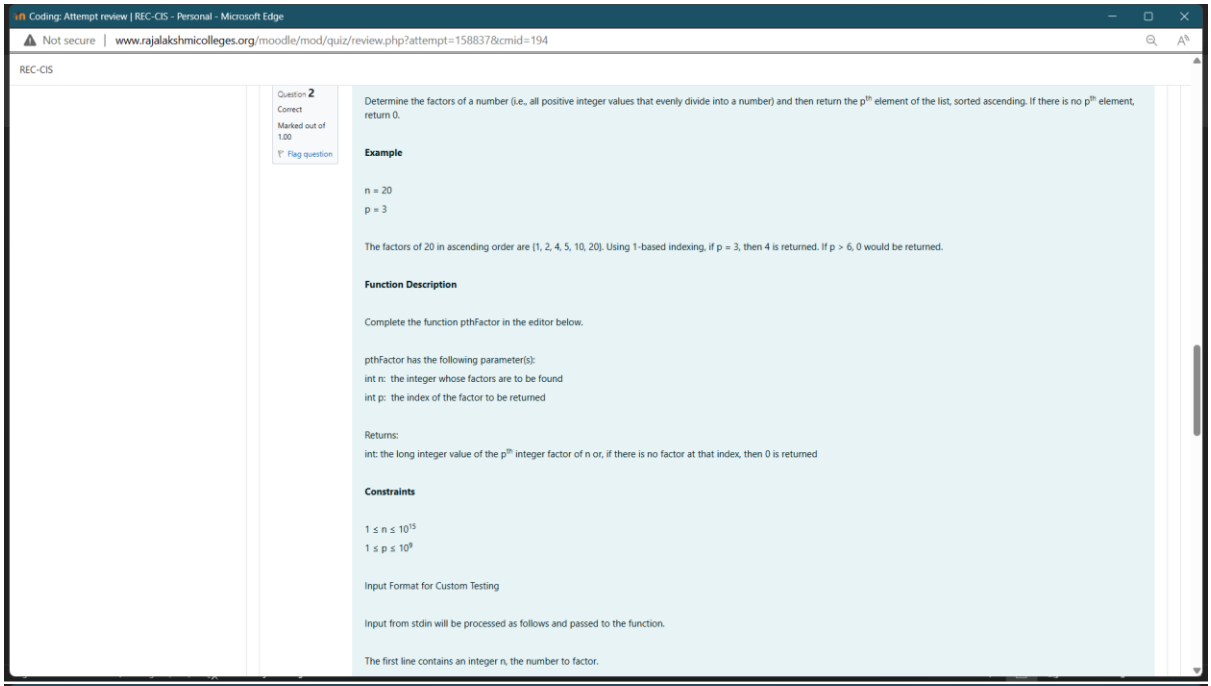
REC-CIS
The second line contains an integer p, the 1-based index of the factor to return.
Sample Case 0
Sample Input 0
STDIN Function
----- --------
10 → n = 10
3 → p = 3
Sample Output 0
5
Explanation 0
Factoring n = 10 results in {1, 2, 5, 10}. Return the p = 3rd factor, 5, as the answer.
Sample Case 1
Sample Input 1
STDIN Function
----- --------
10 → n = 10
5 → p = 5
Sample Output 1
0
Explanation 1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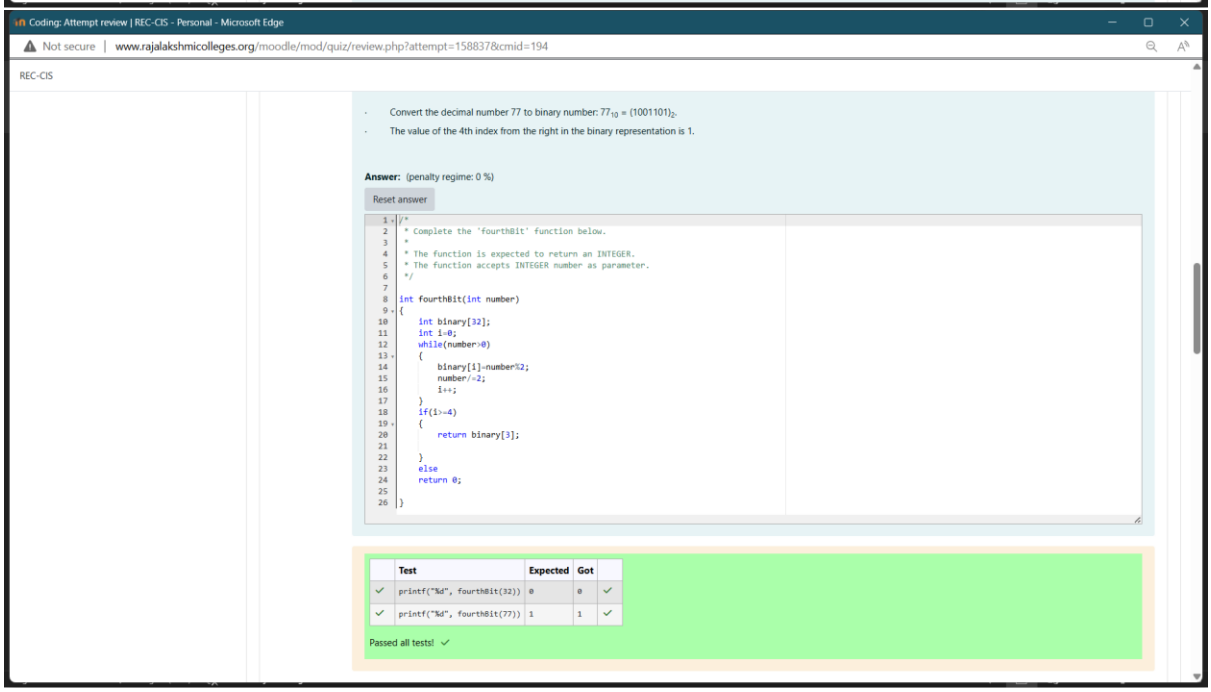
REC-CIS
Question 2
Correct
Marked out of 1.00
Flag question
Determine the factors of a number (i.e., all positive integer values that evenly divide into a number) and then return the pth element of the list, sorted ascending. If there is no pth element, return 0.
Example
n = 20
p = 3
The factors of 20 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 ≤ n ≤ 10^15
1 ≤ p ≤ 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.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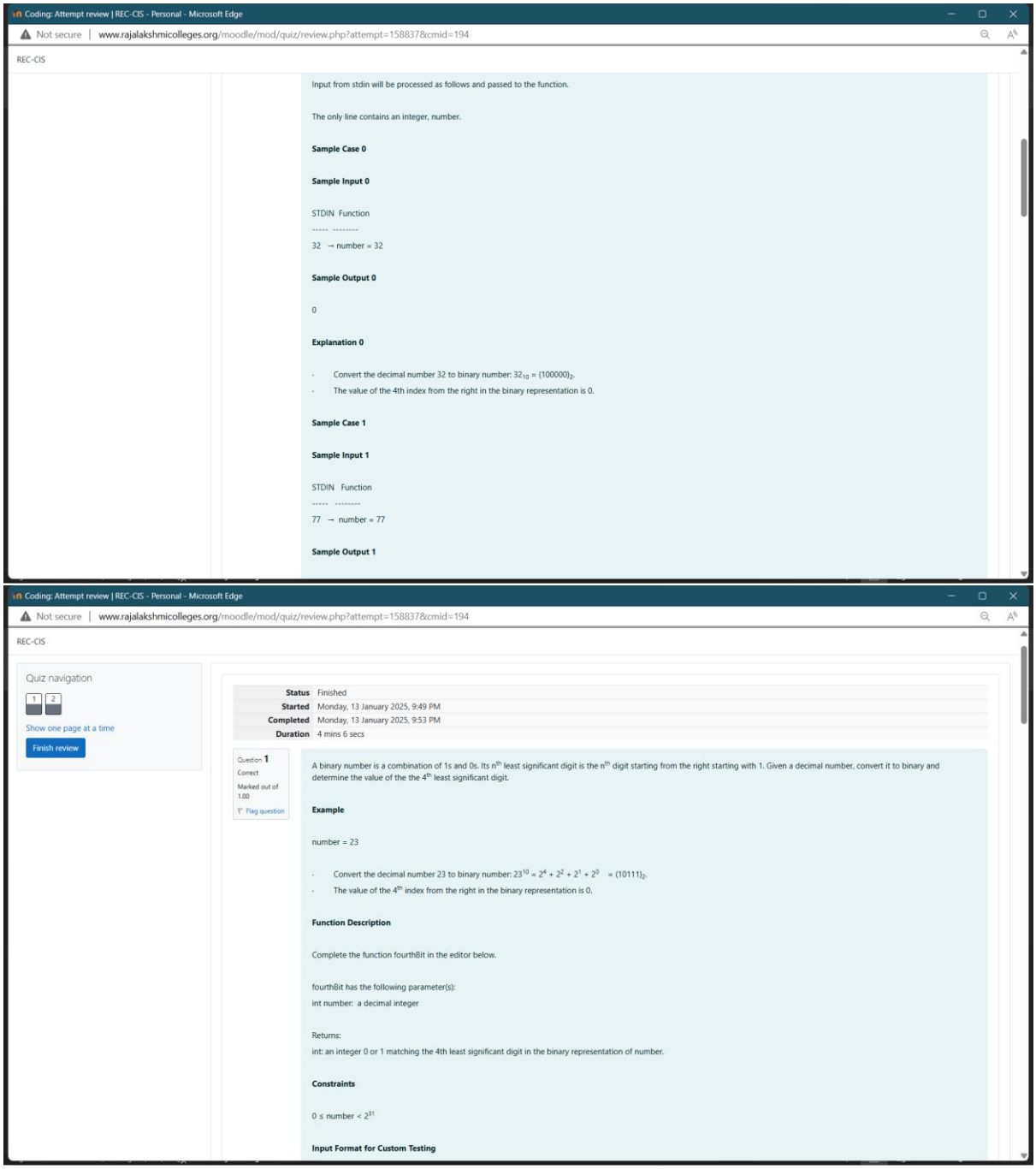
REC-CIS
Convert the decimal number 77 to binary number: 77_10 = (1001101)_2.
The value of the 4th index from the right in the binary representation is 1.
Answer: (penalty regime: 0 %)
Reset answer
/*
* Complete the 'fourthBit' function below.
*
* The function is expected to return an INTEGER.
* The function accepts INTEGER number as parameter.
*/
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!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REC-CIS
Input from stdin will be processed as follows and passed to the function.
The only line contains an integer, number.
Sample Case 0
Sample Input 0
STDIN Function
----- --------
32 → number = 32
Sample Output 0
0
Explanation 0
· Convert the decimal number 32 to binary number: $32_{10} = (100000)_2$.
· The value of the 4th index from the right in the binary representation is 0.
Sample Case 1
Sample Input 1
STDIN Function
----- --------
77 → number = 77
Sample Output 1

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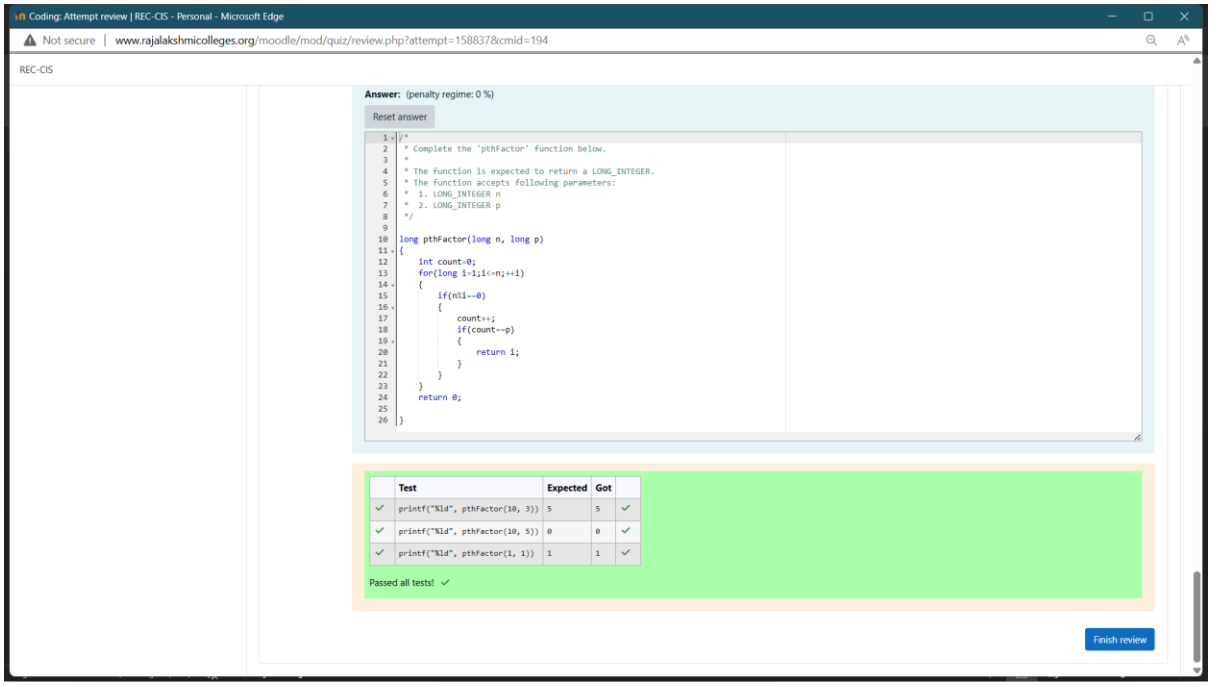
REC-CIS
Quiz navigation
1 2
Show one page at a time
Finish review
Status Finished
Started Monday, 13 January 2025, 9:49 PM
Completed Monday, 13 January 2025, 9:53 PM
Duration 4 mins 6 secs
Question 1
Correct
Marked out of 1.00
Flag question
A binary number is a combination of 1s and 0s. Its nth least significant digit is the nth digit starting from the right starting with 1. Given a decimal number, convert it to binary and determine the value of the the 4th least significant digit.
Example
number = 23
· Convert the decimal number 23 to binary number: $23^{10} = 2^4 + 2^2 + 2^1 + 2^0 = (10111)_2$.
· The value of the 4th index from the right in the binary representation is 0.
Function Description
Complete the function fourthBit in the editor below.
fourthBit has the following parameter(s):
int number: a decimal integer
Returns:
int: an integer 0 or 1 matching the 4th least significant digit in the binary representation of number.
Constraints
$0 \le number < 2^{31}$
Input Format for Custom Testing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REC-CIS
Answer: (penalty regime: 0 %)
Reset answer
/*
* Complete the 'pthFactor' function below.
*
* The function is expected to return a LONG_INTEGER.
* The function accepts following parameters:
* 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
Got
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