





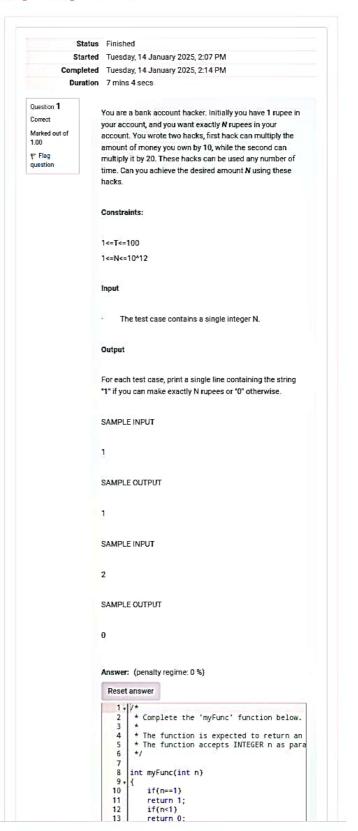
▲ shmicolleges.org



REC-CIS

GE23131-Programming Using C-2024









REC-CIS

	Test	Expected	Got	
~	printf("%d", myFunc(1))	1	1	~
~	printf("%d", myFunc(2))	0	0	~
~	printf("%d", myFunc(10))	1	1	~
~	printf("%d", myFunc(25))	0	0	~
~	printf("%d", myFunc(200))	1	î	~

Question 2
Correct
Marked out of 1.00

Y Flag
question

Find the number of ways that a given integer, X, can be expressed as the sum of the N^{th} powers of unique, natural numbers.

For example, if X=13 and N=2, we have to find all combinations of unique squares adding up to 13. The only solution is 2^2+3^2 .

Function Description

Complete the powerSum function in the editor below. It should return an integer that represents the number of possible combinations.

powerSum has the following parameter(s):

X: the integer to sum to

N: the integer power to raise numbers to

Input Format

The first line contains an integer X.

The second line contains an integer N.

Constraints

1 ≤ X ≤ 1000

2 ≤ N ≤ 10

Output Format

Output a single integer, the number of possible combinations calculated.

Sample Input 0





4:06 PM 1



REC-CIS

Question 2
Correct
Marked out of 1.00
F Flag question

Find the number of ways that a given integer, **X**, can be expressed as the sum of the **N**th powers of unique, natural numbers

For example, if X=13 and N=2, we have to find all combinations of unique squares adding up to 13. The only solution is 2^2+3^2 .

Function Description

Complete the powerSum function in the editor below. It should return an integer that represents the number of possible combinations.

powerSum has the following parameter(s):

X: the integer to sum to
N: the integer power to raise numbers to
Input Format

The first line contains an integer X.

The second line contains an integer N.

Constraints

1 ≤ X ≤ 1000 2 ≤ N ≤ 10

Output Format

Output a single integer, the number of possible combinations calculated.

Sample Input 0

10 2

Sample Output 0

1

Explanation 0

If X = 10 and N = 2, we need to find the number of ways that 10 can be represented as the sum of squares of unique

 $10 = 1^2 + 3^2$

This is the only way in which 10 can be expressed as the sum of unique squares.

Sample Input 1

100

2

Sample Output 1

REC-CIS

