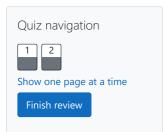
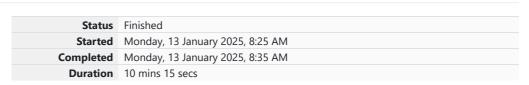
# GE23131-Programming Using C-2024





Question **1**Correct
Marked out of 1.00

Flag question

You are a bank account hacker. Initially you have 1 rupee in your account, and you want exact You wrote two hacks, first hack can multiply the amount of money you own by 10, while the s These hacks can be used any number of time. Can you achieve the desired amount N using t

#### **Constraints:**

1<=T<=100 1<=N<=10^12

#### Input

· The test case contains a single integer N.

#### Output

For each test case, print a single line containing the string "1" if you can make exactly N rupe

SAMPLE INPUT

1

SAMPLE OUTPUT

1

SAMPLE INPUT

2

SAMPLE OUTPUT

0

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

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	1

Passed all tests!

Question **2**Correct
Marked out of 1.00

□ Flag question Find the number of ways that a given integer, X, can be expressed as the sum of the N<sup>th</sup> pownumbers.

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

## **Function Description**

Complete the powerSum function in the editor below. It should return an integer that represe 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

 $1 \le X \le 1000$ 

 $2 \le N \le 10$ 

# **Output Format**

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

#### Sample Input 0

10

#### 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 snumbers.

$$10 = 1^2 + 3^2$$

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

2

#### **Explanation 1**

$$100 = (10^2) = (6^2 + 8^2) = (1^2 + 3^2 + 4^2 + 5^2 + 7^2)$$

# Sample Input 2

100

3

Sample Output 2

1

# **Explanation 2**

100 can be expressed as the sum of the cubes of 1, 2, 3, 4.

(1 + 8 + 27 + 64 = 100). There is no other way to express 100 as the sum of cubes.

Answer: (penalty regime: 0 %)

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