Practice Arena

Practice problems aimed to improve your coding skills.

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- BONUS-PRAC-02
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  - Pollution Problem
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  - Rick-s Number
  - Its Tax Time
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  - Isotonic Regression
  - Super Leap Years
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- LAB-PRAC-14_SORT-MISC

Super Leap Years

LAB-PRAC-04_COND

Super Leap Years [20 marks]

Problem Statement
Suppose we have 3 positive numbers A, B, C, and are given a year Y. Using these we define 3 rules as given below

1. **Rule 1**: If Y is divisible by A, we **call** Y a super leap year
2. **Rule 2**: If Y is divisible by A but is also divisible by B, we **don't call** Y a super leap year
3. **Rule 3**: If Y is divisible by A but is also divisible by both B and C, we **call** Y a super leap year

Any year that is not called a super leap year is called a super common year.

You will be given a year Y, as a **positive integer**, as well as four numbers, A, B, C, N, all four given as **positive integers**, in a format given below. **The number N will be either 1, 2 or 3**. You have to output the following two labels in two different lines.

1. Apply rules 1, 2, and 3 with Y, A, B, C to find if Y is called a super leap year or not. If it is a super leap year, print "Leap" (without quotes) else print "Common" (without quotes).
2. Apply only rules from rule 1 till rule N with Y, A, B, C to find if Y is called a super leap year or not. If it is a super leap year, print "Leap" (without quotes) else print "Common" (without quotes). Remember that the number N will be either 1, 2 or 3.

Caution

1. Be careful about extra/missing lines and extra/missing spaces.
2. For example, if N = 2, then in the second line, you only have to apply rules 1 and 2 to find out if Y is a super leap year or not. If N = 1, then in the second line, you only have to apply rule 1 to find out if Y is a super leap year or not.
3. In the first line, all three rules must be applied to find out whether the year is a super leap year or not, irrespective of the value of N.
4. Note that there are no restrictions on A, B, C other than that they are positive integers. A, B, C need not be in increasing or decreasing order. A need not divide B or C or vice versa etc etc.

INPUT:
Y A B C N
OUTPUT:
Leap/Common
Leap/Common

EXAMPLE:
INPUT
2000 4 100 400 2

OUTPUT:
Leap

Common

Grading Scheme:
Total marks: **[20 Points]**

There will be partial grading in this question. There are two lines in your output. Printing each line correctly, in the correct order, carries 50% weightage. Each visible test case is worth 2 points and each hidden test case is worth 4 points. There are 2 visible and 4 hidden test cases.

Please remember, however, that when you press Submit/Evaluate, you will get a green bar only if all parts of your answer are correct. Thus, if your answer is only partly correct, Prutor will say that you have not passed that test case completely, but when we do autograding afterwards, you will get partial marks.

Start Solving! (/editor/practice/6058)