

Digit Dilemma

Problem Statement:

Prime Numbers are most mysterious number in mathematics. I know you love prime numbers. Now, the problem is easy. For a set of 3 positive integers, determine the degree to which they are relatively prime.

DEGREE 0 – no relatively prime pairs.

DEGREE 1 – 1 pair of relatively prime numbers.

DEGREE 2 – 2 pairs of relatively prime numbers.

DEGREE 3 – all 3 numbers are relatively prime.

Two integers are relatively prime if they have no common factors other than 1.

Input:

The first line in the data set is an integer **N** ($1 \leq N \leq 200$) that represents the number of data collections that follow. Each data set contains **3 integers a, b & c** ($1 \leq a \leq b \leq c \leq 500$)

Output:

Give the number of Degree. All letters are upper case.

The output is to be formatted exactly like that for the sample output given below.

Sample Input/Output:

Sample Input	Sample Output
3	Case 1: 0 DEGREE
6 8 10	Case 2: 2 DEGREE
5 7 25	Case 3: 3 DEGREE
3 4 5	

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