

Ctxy Decimal System**CTXY****100 Points**

A crazy professor has thought about a new system of numbers. The system designed, has four letters “c”, “t”, “x”, “y” and eight digits “2”, “3”, “4”, “5”, “6”, “7”, “8”, “9”.

In this system, letters “c”, “t”, “x”, “y” corresponds to 1000, 100, 10, 1 respectively, and “2”, “3”, “4”, “5”, “6”, “7”, “8”, “9” corresponds to 2, 3, 4, 5, 6, 7, 8, 9, respectively in normal decimal system.

For example,

“2ctx7y”, “ct4x2y”

Here, $2ctx7y = 2 * 1000 + 100 + 10 + 7 * 1 = 2117$

$ct4x2y = 1000 + 100 + 4 * 10 + 2 * 1 = 1142$

He plans to teach his 5 year old daughter the art of addition with this odd looking number system. Your job is to help her by writing a program that reads two CTXY-string and computes the sum of their values in CTXY system.

Input

First line is a positive integer **k** (≤ 500) i.e the number of test cases. 'k' lines follow, each containg 2 numbers in CTXY format.

Output

For each test case, your program should print the sum of the two CTXY- strings give in a test case in CTXY Decimal System.

Assumption:- Sum of two CTXT-string is less than or equal to 9999.

EXAMPLE:**Input :**

3

xy x9y

y 9y

9c8t7xy t2x8y

Output :

3x

x

9c9t9x9y