Convert From Decimal

Given **t** integers called **n** in base 10, convert them to base **x**.

Input

The first line of input contains **t**, the amount of numbers you will have to convert.

The next **t** lines contain two numbers, **n** and **x** where **n** is the original base 10 number and **x** is the base you must convert it to.

Input	Output
6 2 7 8 34 16 1792 19 12345 10 477 36 1295	111 70 42 1F3E 477 ZZ

Add Two Numbers

You will be given *t* test cases.

Given a base *k* and two numbers *x* and *y*, output the sum of *x* and *y*.

It is guaranteed that *x* and *y* are provided to you in base *k*.

Input

The first line of input contains *t*, the number of test cases.
Then there will be *t* lines that contain three variables.

The first number on each line is *k*, the base that you are working in.
The next two numbers are *x* and *y*.

Input	Output
8 10 78 30 2 1001 1100 8 1362 36 16 7B14AD 5A6C 19 GH2B9 43999 36 ZZZZ ZZZZ 13 13 91 5 4321 23	108 10101 1420 7B6F19 121C1I 1ZZZY A4 4344