

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	111
8 34	70
16 1792	42
19 12345	1F3E
10 477	477
36 1295	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
9	
10 78 30	108
2 1001 1100	10101
8 1362 36	1420
16 7B14AD 5A6C	7B6F19
19 GH2B9 43999	121C1I
36 ZZZZ ZZZZ	1ZZZY
13 13 91	A4
5 4321 23	4344
36 LEHR RBQVUV	RCCACM