4660 - A+B

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Given two integers A and B that are not necessarily in base-10, find the smallest possible $A + B$ in base-10.

For example,

A = 213, possibly base-4 (39 in base-10)
B = 4721, possibly base-8 (2513 in base-10)

$A + B$ = 39 + 2513 = 2552

Input

First line of the input contains a positive integer T ($1 <= T <= 100$), the number of cases. Each case contains two positive integers A and B. A and B will contain at most 5 digits, each digit will be between 0 and 9, inclusive, and no leading zeroes.

Output

For each case, output an integer in base-10 denoting the smallest possible $A + B$.

Sample Input

```
3
213 4721
1001 90
638 241
```

Sample Output

```
2552
99
592
```

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