A + B Problem

Description

Oh, A + B is an easy problem and all of us must have solved it. But how about this complex A + B problem?

Input

The first line contains an integer T indicating the total number of test cases. Each test case contains one line with two complex numbers A, B in the form $x \pm yi$.

- $1 \leq T \leq 1000$
- $-10^9 \leq x, y \leq 10^9$
- Both x, y are integers.

Output

For each test case, please output a line with the result of $A + B$ in the same form. Note that you should not omit any part of complex number even if it is zero, and we always use $x + 0i$ instead of $x - 0i$ when the imaginary part is zero.

Sample Input

```
2
1+2i 3-4i
5+14i -5-14i
```

Sample Output

```
4-2i
0+0i
```