You are to write a program that reduces a fraction into its lowest terms.

Input

The first line of the input file gives the number of test cases N (≤ 20). Each of the following N lines contains a fraction in the form of p/q ($1 \leq p, q \leq 10^{30}$).

Output

For each test case, output the fraction after simplification.

Sample Input

```
4
1 / 2
2 / 4
3 / 3
4 / 2
```

Sample Output

```
1 / 2
1 / 2
1 / 1
2 / 1
```