

Problem F

QUEEN OF SPADES

File name: F.{java,c,cpp}

You're given a pile of N playing cards. K of the N cards are the Queen of Spades. You draw two cards from the pile uniformly at random. The probability that both cards are the Queen of Spades is A/B for some integers A and B .

Given A and B , output N and K .

Program Input

The first line of input is the number of test cases T ($1 \leq T \leq 100$). The next T lines contain a test case of the format " $A B$ ". The values of A and B will each fit in 32-bit integers.

Program Output

For each test case, output the pair of integers N ($2 \leq N \leq 10^6$) and K ($2 \leq K \leq N$) on a line separated by a single space. If more than one solution exists, output the one with lowest N .

Sample Input & Output

INPUT	OUTPUT
3	8 7
3 4	4 2
1 6	34846 21091
37 101	

