

Problem C Secret Numbers

Input File: C.DAT Program Source File: C.PAS or C.C or C.CPP

Two natural numbers **a** and **b** are chosen (1 < a < b). Person M is told the multiple of **a** and **b** (a*b), and person S is told the sum of **a** and **b** (a+b). The discussion between M and S goes like this:

M: I do not know the numbers a and b.S: I do not know them either, but I knew you would not know them.M: Now I know the numbers!S: Now I know them, too!

Input: The input is given in a text file. The input file contains pairs of natural numbers x and y (2<=x<y<=550), one pair per line. The input is guaranteed to be correct.

Output: For each pair **x**, **y**, find all pairs of **a** and **b**, such that **x**<=**a**<**b**<=**y** and that the given discussion is possible. Write these pairs in a single line, and finish that line with "no more pairs." if there are **a** and **b** found in the given range, or write simply "no pairs." if there are not. Separate the numbers of a pair with a comma, terminate each pair with a semi-colon, and separate different pairs with a blank after the semi-colon, as shown in the example below.

Example:

input	output
2 10	no pairs.
2 20	4,13; no more pairs.