

Numbers

Given two positive integers, find all integers that are strictly between them.

Input

Input consists of a single line that contains two positive integers A and B .

Output

The first line of output should consist of a single integer — the number of integers that are strictly between A and B . If there is at least one such integer, then all of them should be listed in increasing order in the second line of output.

Examples

Input	Output
8 14	5 9 10 11 12 13

Input	Output
1 2	0

Scoring

Your submission will score full points for a subtask if it produces correct output for each testcase in that subtask. Otherwise, if it produces correct first line of output for each testcase, it will score 50% of the points for the subtask. In all other events it will score no points for the subtask. Note that no points will be awarded for a subtask if (in particular) time limit is exceeded or a runtime error is encountered in at least one testcase in that subtask.

Subtask 1 (30 points): $1 \leq A, B \leq 1000$.

Subtask 2 (70 points): $1 \leq A, B \leq 10^{15}$, A and B differ by at most 100 000.

Constraints

Time limit: 1 s.

Memory limit: 64 MB.