

## Problem E. Nice sequence

Input file:            **standard input**  
Output file:           **standard output**  
Time limit:            2 seconds  
Memory limit:         256 megabytes

At their leisure time Tima and Kanat play with sequences of integers. Tima considers a sequence *nice* if the sum of any  $N$  consecutive numbers of the sequence is negative and Kanat considers a sequence *nice* if the sum of any  $M$  consecutive numbers of the sequence is positive. If the sequence does not have  $N$  and/or  $M$  consecutive numbers, it is considered to be *nice* for Tima and/or Kanat respectively.

Find the sequence of **maximum** possible length that will be *nice* for both of them.

### Input

The first line contains one integer  $T(1 \leq T \leq 10)$  — the number of tests.

In the next  $T$  lines there are two integers  $N$  and  $M$ , separated by space.

### Output

For each test output 2 lines: in the first line output one integer  $K$  — maximum length of the sequence, which is *nice* for both Tima and Kanat. In the second line output  $K$  numbers separated by space — the sequence itself. The numbers should not exceed  $10^9$  by absolute value and should be non-zero. It is guaranteed that it is possible to find a sequence of maximum length that satisfies above condition. When  $K = 0$  second line should be empty.

### Scoring

This task includes seven subtasks:

1.  $1 \leq N, M \leq 100$ , and  $\max(N, M)$  is divisible by  $\min(N, M)$ . Score 6 points.
2.  $1 \leq N, M \leq 10^4$ ,  $\min(N, M) = 2$ . Score 9 points.
3.  $1 \leq N, M \leq 10$ . Score 14 points.
4.  $1 \leq N, M \leq 2 \cdot 10^5$ ,  $|N - M| \leq 2$ . Score 15 points.
5.  $1 \leq N, M \leq 2000$ . Score 14 points.
6.  $1 \leq N, M \leq 5 \cdot 10^4$ . Score 18 points.
7.  $1 \leq N, M \leq 2 \cdot 10^5$ . Score 24 points.

### Example

standard input	standard output
3	2
3 1	1 2
2 3	3
1 1	3 -4 2
	0