

Numbers

Jojo challenged Lili to print all numbers from L to R (inclusive) satisfying some conditions.

The conditions are as follows:

1. The number is the multiple of A.
2. The number contains the digit B.

Lili has to print the number if it satisfies at least one of the two conditions. Help Lili to do that.

Format Input

The first line of the input will contain an integer T, the number of test cases.

Each test case will contain four integers, L, R, A, and B. L and R are the first and last number that must be checked. A and B are the numbers that are in the condition above.

Format Output

For each test case, print "Case #X:" (X starts with 1).

Then on the next line, print all the numbers that fulfill at least one of the condition.

Constraints

$1 \leq T \leq 10$

$1 \leq L \leq R \leq 1000000000000$

$0 \leq (R-L) \leq 100$

$1 \leq A \leq 1000000000000$

$0 \leq B \leq 9$

Sample Input	Sample Output
4 5 10 3 7 1 10 7 1 1 8 2 9 89 99 100 9	Case #1: 6 7 9 Case #2: 1 7 10 Case #3: 2 4 6 8 Case #4: 89 90 91 92 93 94 95 96 97 98 99