AP - Complete The Series v2

After solving "AP - Complete The Series (easy)" very fast, Lucifer decided to make it little more interesting.

He said

He will be give you the 3rd term , 4th last term and the sum of the AP series. You need print length of the series & the series.

Input

First line will contain a number indicating the number of test cases.

Each of the following t lines will have 3 number '3term', '4Lastterm' and 'sum'

3term - is the 3rd term in the series and

4Lastterm - is the 4th last term in the series and

sum - is the sum of the series.

Output

For each input of the test case, you need to print 2 lines.

fist line should have 1 value- number of terms in the series.

2nd line of the output should print the series numbers separated by single space.

Example

Input:

1 3 7 55

Output: 10 1 2 3 4 5 6 7 8 9 10

NOTE - In all the test cases all the series elements are positive integers. The series will have at least 7 elements. number of test cases <=100. All the numbers will fit in 64 bits(long long in C)