Problem L. Recover Statistics

Time limit: 1 second
Memory limit: 1024 megabytes

You recently conducted a survey on how much time university students spend commuting from their dorms to school buildings. You believe that this survey could significantly improve campus planning, making commuting easier for both students and faculty. As part of your analysis, you calculated the P50, P95, and P99 commute times to support your conclusions. Here, Px commute time being y means that **exactly** $x\%$ of the commute times in the entire dataset are less than or equal to y. For example, the P50 of the set $\{1, 1, 4, 5, 1, 4\}$ can be 1, 2 or 3, since there are **exactly** $6 \times 50\% = 3$ values less than or equal to 1, 2 or 3. However, there are no valid P95 or P99 for these values because $6 \times 95\%$ and $6 \times 99\%$ are not integers.

Unfortunately, something went wrong — you accidentally deleted the entire dataset. The only values you have left are the P50, P95, and P99 of the commute times. Since you do not have time to redo the survey, you need to reconstruct a set of data that matches all of the P50, P95, and P99 values.

Input

The input consists of three lines. The first line contains a single integer a, representing the P50 value. The second line contains a single integer b, representing the P95 value. The third line contains a single integer c, representing the P99 value. ($1 \le a < b < c < 10^9$)

Output

Output two lines. The first line should contain a single integer n ($100 \le n \le 10^5$), representing the length of the data set.

The second line should contain n integers $a_1, a_2, \ldots, a_n$ ($1 \le a_i \le 10^9$), representing the reconstructed data set. The integers can be in any order. Any output that meets the requirements will be considered correct.

Example

standard input	standard output
50 95 99	100 1 2 ... 100

Note

The example output omits the values between 3 and 99 (inclusive) for display purposes. In your output, you must include all of these values.

Please note that the definition of Px values in this problem is different from the x-th percentile.