TCCC '25 April P2 - Modular Clock

Time Limit: 3.0s Memory Limit: 64M

You are given a clock measuring time in the format **DDD:HH:MM:SS** (days, hours, minutes, seconds). Given a start time and an end time, find the difference in time between them and print the time difference in the same format.

Input Specification

The first line of input will be a string indicating the starting time in the format **DDD:HH:MM:SS**.

The next line of input will be a string in the same format indicating the ending time.

It is guaranteed that each unit of time will not go past their boundary (ie. no time such as 1001:25:63:61)

The days will range from 000-999, the hours 00-23, the minutes 00-59, and the seconds 00-59.

Output Specification

Print the difference in time in the same format.

Note: The end time may be before the starting time. In such cases, you must "wrap-around" the end time to get back to the starting time and calculate the difference.

ie. The difference between 999:23:59:59 and 000:00:00 would be 000:00:00:01.

Sample Input

234:13:34:09 412:18:52:43

Sample Output

178:05:18:34

Sample Input 2

500:12:45:30 750:20:10:15

Sample Output 2

250:07:24:45

Sample Input 3

937:13:34:22 104:18:48:37

Sample Output 3

167:05:14:15