Siena College's 31st Annual High School Programming Contest Sponsored by Transfinder

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Gold Problem #2: This Problem is Alarming!!

<u>Background Information</u>: You are the programmer for the ACME Clock Company which makes a variety of alarm clocks. A popular clock for the army is a digital alarm clock based on military time. Military time starts at midnight with a display of 00:00 and progresses to noon with a display of 12:00 and continues until one minute before midnight with a display of 23:59 before cycling back to 00:00 at midnight. ACME wants to add a feature that allows the user to push a button which will cause the clock to display the hours and minutes between the current time and the time when the alarm will sound. This is where you earn your money.

Programming Problem:

Input: The current military time in hours and minutes, (on separate lines) followed by a different alarm time in military hours and minutes (again on separate lines).

Output: The hours and minutes (separated by a space) between the current time and the alarm time. In all outputs, the minutes must be less than 60.

Example 1: Input: 18 40 7 20

Output: 12 40

Example 2: Input: 18 20 7 40

Output: 13 20

Example 4: Input: 7 20 18 40 Output: 11 20