Problem 8	Are we there yet?	3 Points

Program Name: there.cpp   Input File: there.dat

Every parent has heard the question, "Are we there yet?" countless thousands of times. If you are Homer Simpson, you simply answer "No!" countless thousands of times. On behalf of all other parents, you are going to write a program that will estimate an answer to the follow-up question, "How much longer?"

The families are traveling along U.S. interstates which have mile markers alongside the road. The values on the mile markers represent how far (in miles) the marker is from the origin or entry of the interstate highway into the state you are in. Your program will use collected data to estimate "how much longer" (in hours, minutes, and seconds) to the destination. Your program is given two data points each with a time (expressed in military time) and a mile-marker that was passed at that time. Your program is then given a mile marker that is the destination. Your program will then calculate "how much longer" it will take to reach the destination mile marker. You may safely make the following assumptions:

1. The family only travels along interstate highways.
2. All points referenced by your program will be within a single state.
3. The family only travels during a single day and therefore all times can be represented as hours, minutes, and seconds. (Your program will not have to consider progress samples taken on different days.)
4. The family can travel either direction on an interstate (so that mile markers may count up or down as the family progresses).
5. The family will never travel at such high speed that they can pass two mile markers at the same second.
6. All times used by your program have been adjusted appropriately for changing time zones etc.

For example, if your program was given:
1. the family passed mile marker 417 at 10:45:17
2. the family passed mile marker 278 at 13:12:27
3. the family's destination was mile marker 116

Your program should determine that it will take 2 hours, 51 minutes and 31 seconds (expressed 02:51:31) to reach mile marker 116 from mile marker 278.

Input
Input to your program consists of a series of "Are we there yet?" tests. Each input line describes exactly one test. A test consists of two points (mile marker and time the mile marker was passed) and a destination mile marker. Test point #1 starts with an integer for the mile marker at point 1 (in column 1) followed by a single blank followed by the military time the point was passed in the format hh:mm:ss (including the colons). The input line then contains a blank followed by the details for point #2 (which are in the same format as point #1). The input line then contains a blank followed by the mile marker of the destination. You should assume that the family passes point #1 and then passes point #2. You should also assume that the input file is correct and does not include any extraneous input including embedded or trailing blanks nor embedded or trailing empty lines.

Output
For each input test, your program should print the amount of time that it will take for the family to drive from point #2 to the destination mile maker. The output should be in the format "hh:mm:ss" with leading zeroes as necessary to maintain the 2-digit format of each time element.

Your program should print only the amount of time to go and nothing else. See the sample output below.

Example: Input File
```
110 12:00:00 310 14:00:00 610
417 10:45:17 278 13:12:27 116
27 01:25:44 96 02:21:59 816
```
Output to screen
```
03:00:00
02:51:31
09:46:57
```