## DWITE Online Computer Programming Contest January 2007

### Problem 3

# **Elapsed Time in Seconds**

Your job is to determine how many seconds have passed since midnight on January 1, 2000 until a given date and time.

The input file (**DATA31.txt** for the first submission and **DATA32.txt** for the second submission) will contain five lines of data. Each line will contain a date and time in the form: DD/MM/YYYY HH:MM:SS, where 1<=DD<=31, 1<=MM<=12, 2000<=YYYY<=2999, 0<=HH<=23, 0<=MM<=59, and 0<=SS<=59. DD, MM, HH, MM, and SS will always be two digits and YYYY will always be 4 digits. There is a single space between YYYY and HH. Assume that the given time and date is after midnight January 1, 2000.

The output file (**OUT31.txt** for the first submission and **OUT32.txt** for the second submission) will contain five lines of data, corresponding to each line of the input file. Each line will contain the number of seconds from midnight January 1, 2000 until the given date and time from the corresponding line of input file.

Don't forget about leap years! Leap years are years with an extra day (February 29); this happens almost every four years. Generally, leap years are divisible by four, but century years are special, they must also be divisible by 400. The year 2000 was a leap year. The years 2001, 2002, and 2003 were not.

#### **Sample Input (Only three lines given)**

01/01/2000 04:00:00 03/03/2000 14:00:00 23/12/2001 17:17:17

## Sample Output

14400 5407200 62443037