Problem 3

What Time Is It?

3 Points

Personal computers keep their internal time by counting the seconds since an epoch. For example, UNIX frequently uses the epoch of midnight January 1, 1970. In this program, we will instead determine the military time (HH:MM:SS) where the epoch is re-established each day at midnight and an internal clock counts the seconds during a day. Military time means that there is no A.M. or P.M. Instead, the hours of the day are numbered 0 through 23. Zero seconds occurs at midnight and is converted to 00:00:00 in military time and second number 86399 occurs 1 second before midnight (23:59:59 in military time). HH ranges from 0 to 23 and both MM and SS range from 0 to 59.

Input

Input to your program consists of a series of integers ($0 \le S \le 86399$) each on a line by itself and starting in column 1.

Output

For each time in the input file, your program should calculate the corresponding military time of day in the format HH:MM:SS. Your program should print the military time on a line by itself in the format HH:MM:SS (including the colons). If HH, MM, or SS are less than 10, your program must print the leading zero(s) for the affected field(s).

Example: Input file

86399 873

27342

19842

67829

Output to screen

00:00:00 23:59:59

00:14:33

07:35:42

05:30:42

18:50:29