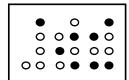
1. Binary Clock

Program Name: Binary.java Input File: binary.dat

Ms. Lane has a binary clock in her classroom. The clock has six columns of lights as shown to the right. Each light represents a power of two with 2^0 being the light on the bottom of a column and continuing upward to 2^3 . The solid circles represent lights that are on and the empty circles indicate lights that are off.



The first column indicates the digit 0 or 1 and the second column indicates the digit 0 through 9 and the two columns together indicate the number of hours 00 though 12. The third column indicates the digits 0 through 5 and the fourth column indicates the digits 0 through 9 and the two columns together indicate the number of minutes 00 though 59. The fifth column indicates the digits 0 through 5 and the sixth column indicates the digit 0 through 9 and the two columns together indicate the number of seconds 00 though 59.

In the clock above, the time is 08:25:59 in hours, minutes, and seconds.

Since some of her students have trouble reading the clock, she wants you to write a program that will read the clock for the students.

Input

The first line of input will contain a single integer n that indicates the number of clock times to be read. For each clock time, there will be a matrix of 4 rows and 6 columns. The matrix will contain spaces that indicate that there is no light, o's that indicate that the light is off, and asterisks (*) that indicates the light is on.

Output

For each clock time, you will print the time in the form hh: mm: ss, one clock time per line.

Example Input File

Example Output to Screen

08:25:59 12:53:47