Time After

Introduction

A simple alarm clock requires a user to set the alarm time as HH:MM. However, sometime you just need the clock to wake you up after a specific amount of time. For example, if the current time is 12:15 and you are about to take a nap for 50 minutes, so you need to set the alarm at 13:05. Write a program to compute the time X minutes after a given time P.

Input

- The first line of input contains two integers **H** $(0 \leq H \leq 23)$ and **M** $(0 \leq M \leq 59)$ representing the hour and minute of the time **P**.
- The next line of input contains a number **X** $(1 \leq X \leq 1440)$ indicating the amount of time in minutes.

Output

The time T to be set on the alarm clock, in the format of HH MM. The hour and the minute must include padding zero to the left as needed. (For example, write 09 03 not 9 3)

Example

Input	Output
09 00 71	10 11
23 45 20	00 05