# Problem 3 – Sum Time Intervals

Write a program to **sum two time intervals** given in format days::hours:minutes (days are optional). Standard 24-hour time is used: **hours** are in range **[0…23]**, **minutes** are in range **[0…59]**.

## Input

* The input is read from the console. It holds two text lines.
  + Each input line holds time interval in format days::hours:minutes.
* Days are optional, but hours and minutes are mandatory.
* Leading zeroes are allowed in all numbers, but not necessary.

## Output

* Print the **sum of the time intervals** at the console in format days::hours:minutes.
* **Minutes** should be displayed with **leading zero**, e.g. **5** should be displayed as “**05**” and **25** should be “**25**”.
* **Hours** should be displayed with **no** **leading zeroes**, e.g. **5** should be displayed as “**5**” and **25** should be “**25**”.
* If **days** are **0** in the result, don’t display them (see the examples below).

## Constraints

* **Minutes** are integers in range **[0…59]**.
* **Hours** are integers in range **[0...23]**.
* **Days** are integers in range **[0...999]**.
* Time limit: **100 ms**. Allowed memory: **16 MB**.

## Sample Input and Output

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |
| 1:15  1:25 | 2:40 | 1:30  2:35 | 4:05 | 0:06  23:55 | 1::0:01 | 3::11:30  12:45 | 4::0:15 |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |
| 0:01  0:01 | 0:02 | 1:00  1:30 | 2:30 | 23:55  03:50 | 1::3:45 | 3::11:30  5::01:20 | 8::12:50 |