# A test of "programming for beginners" – 26 March 2016

## Task 2. Pool tubes

Pool with **volume** **V**there are **two tubes** that are filled. **Each pipe has a certain flow rate** (liters of water passing through a tube for an hour). The worker **placed pipes both** in and out of **N hours**. Write a program that makes the State of the pool, **at the time when the worker returns.**

### Login

From the console read **four lines**:

        The first line contains the number **V – Pool volume in litres**– an integer in the range [1 ... 10 000].

        The second line contains the number **P1 – the first tube flow rate per hour**– an integer in the range [1... 5000].

        The third line contains the number **P 2 – the second tube flow rate per hour**– an integer in the range [1... 5000].

        The fourth line contains the number **H – the hours that the worker is absent**– floating point number in the range [1.0... 24.00]

### Exit

To print to the console **one of two possible States**:

        How has filled the pool and tube with what percent is contributed. All rates reduced to integer (without rounding).

o " The pool is **[x] %**full. Pipe 1: **[y]%**. Pipe 2: **[z] %**."

###         if overflow – how many liters is an overflowing in the given time, float

o "For **[x]** hours the pool overflows with **[y]** liters."

\* **Note** that, because of **that whole numbers** are **losing their data** and normally **the sum of the percentages to be 99%, not 100%.**

### Sample input and output

|  |  |  |
| --- | --- | --- |
| **Login** | **Exit** | **Explanations** |
| 1000  100  120  3 | The pool is 66% full. Pipe 1: 45%. Pipe 2: 54%. | For 3 hours:  The first tube is filled – 300 l.  The second tube is filled up-360 l.  A total of 660-l . < 1000 l . = > 66% are filled  The first tube has contributed with 45% (300 of 660 l.).  The second tube is contributed by 54% (360 of 660 l.). |
| 100  100  100  2.5 | For 2.5 hours the pool overflows with 400 liters. | For 2.5 hours:  The first tube is filled – 2 5 0 l.  The second tube is filled – 2 5 0 l.  Total – 5 00 (l) . > 100 l . => 4 00 (l) . have gotten. |

Testing of the solution: [https://judge.softuni.bg/Contests/Compete/Index/179#1](https://www.microsofttranslator.com/bv.aspx?from=bg&to=en&a=https%3A%2F%2Fjudge.softuni.bg%2FContests%2FCompete%2FIndex%2F179%231).