# A test of "fundamentals of programming"-17 September

## Task 2. Three brothers

Three brothers decided to surprise his father, like clean his garage together. Big brother Sam clean for certain hours – **and**. Middle brother clean for himself**in** hours. Younger brother Sam clean for**the** hours. The father goes to fish and no **D**hours.

Write a **program** that calculates whether the three brothers can clear the garage and together to surprise his father or not.

The total time for the shoe, add **15% for holiday**.

### Login

The input is **read from the console** and consists of **4 rows**:

        **The time of the first brother for cleaning alone**– **a real number** in the interval **[0.00 ... 99.00]**

        **The time of the second brother for cleaning alone**– **a real number** in the interval **[0.00 ... 99.00]**

        **The time of the third brother for cleaning alone**– **a real number** in the interval **[0.00 ... 99.00]**

        **Time for fishing of the father**– **a real number** in the interval **[0.00 ... 99.00]**

### Exit

The console should be **printed two lines**.

1. Time for cleaning and vacation, formatted to a second sign: **"Cleaning time: {Time for cleaning}"**

2. Is there any surprise or not:

        If the brothers **are surprised the father (time left > 0)**: " **Yes, t here is a surprise - time-left {balance} hours.**"the result must be **rounded to integer** (**the IP. 1.90 -> 1**).

        If the brothers **are NOT surprised the father** : "**No, there isn ' t a surprise -shortage of time-{shortage} hours.**"the result must be **rounded to the higher whole number** (**the IP. 1.10 -> 2**).

### Sample input and output

|  |  |  |
| --- | --- | --- |
| **Login** | **Exit** | **Explanations** |
| 3  4  5  3.6 | Cleaning time: 1.47  Yes, there is a surprise - time left -> 2 hours. | **total time**=1 / (1/3+1/4+1/5)= **1.27659574468085 hours**    **time to rest**= 1.27659574468085 \*0.15=**1.46808510638298 hours**  3.6 - 1.46808510638298 = 2.13191489361702 **= 2 hours** |
| **Login** | **Exit** | **Explanations** |
| 3.2  2.5  1.24  0.5 | Cleaning time: 0.76  No, there isn't a surprise - shortage of time -> 1 hours. |  |