# A test of "programming for beginners" – 17 July 2016

## Task 2. Vintage

From the **Vineyard with an area** **X square metres**is allocated **40% of the harvest for the production of wine**by **1 sq.m vineyard**you **earn** **Y kilos of grapes**For **1 litre of wine** are **need 2.5 kg grapes**. **The desired quantity of wine** for sale is **Z liters**.

Write a **program** that **calculates how much wine can be produced** and **whether** this amount **is enough.** **If it is enough**, **the remainder are equally divided** **between the workers of the vineyard**.

### Login

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

        1st row: **X sqm's Vineyard**– **an integer in the range** **[10 ... 5000]**;

        2nd row: **Y grapes for one sq.m**– **a real number in the interval [0.00 ... 10.00]**;

        3rd row: **Z need gallons of wine**– **an integer in the range** **[10 ... 600] ;**

        4th row: **number of workers** – **an integer in the range** **[1 ... 20] ;**

### Exit

The console must be printed the following:

        If **the** wine is **less than the required**:

o "**It will be a tough winter! More {nedostigaŝo winewine liters needed}.**"

  **The result**it has to be**plump to the lower integer**

        If **the** wine is **more than the necessary**:

o "**Good harvest this year! Total wine: {total wine} liters.**"

  **The result**shouldis **rounded to** **(p) Oh -low integer**

o "**{Remaining wine}-> {left literswine for 1 workerliters per person}.**"

  And**the two results**should be **rounded to the higher whole number**

### Sample input and output

|  |  |  |
| --- | --- | --- |
| **login** | **exit** | **comments** |
| 650  2  175  3 | Good harvest this year! Total wine: 208 liters.  33 liters left -> 11 liters per person. | **A total of grapes**: 6 50 \* 2 = **1 300**  **Wine**= 4 0% \* 1300 / 2,5 = **208**  **208 > 175**  208-175 = **33 l left** -> **11 l per person** |
| 1020  1 .5  425  4 | It will be a tough winter! More 180 liters wine needed. | **A total of grapes**: 1 020 \* 1.5 = **1 53 0**  **Wine**= 4 0% \* 1 5 30 / 2,5 = **244.80**  **244.80 < 425**  425 - 244.8 = **180.2 -> 18** **0 l do not reach** |

Testing of the solution: [https://judge.softuni.bg/Contests/Compete/Index/233#1](https://www.microsofttranslator.com/bv.aspx?from=bg&to=en&a=https%3A%2F%2Fjudge.softuni.bg%2FContests%2FCompete%2FIndex%2F233%231)