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

## Task 1 . Birthday

For his birthday he got Lyubomir aquarium with the form of parallelepiped. **Initially read from the console on separate lines its dimensions-length, width and height in centimeters.** You need to calculate how many gallons of water will collect the Aquarium, if you know that a certain percentage of its capacity is occupied by sand, plants, heater and pump.

One liter of water equals one cubic decimeter/1 l = 1 DM3/.

**To write a program that calculates the liters of water are needed to fill the tank.**

### Login

From the console read **4 rows**:

**1.** **Length in cm – an integer in the range [1,0 ... 500] ;**

**2.** **Width in cm – an integer in the range [1,0 ... 300];**

**3.** **Height in cm – an integer in the range [1,0... 200];**

**4.** **Percentage – a real number in the interval** **[0.000 ... 100.000];**

### Exit

To print to the console **a number**:

        **litres of water, which will collect the fish tank**, **formatted to the third decimal place**.

### Sample input and output

|  |  |  |
| --- | --- | --- |
| **Login** | **Exit** | **Explanations** |
| 85  75  47  17 | 248.689 | Calculate **volume of Aquarium**:  **volume of tank**= 85 \* 75 \* 47 =**299625** cm3  **total litres, which will bring together:**299625 \* 0.001 =**299.625** liters  **rate:**17\*0.01=**0.17**  **litres, which will actually need:**299.625 \* (1-0.17) = **248.68875 liters** |
| **Login** | **Exit** |  |
| 105  77  89  18.5 | 586.445 |  |