# A test of "fundamentals of programming" – 20 November 2016

## Task 4. Logistics

You are responsible for the logistics of the various loads. **Depending on the weight** of the load is **need a different vehicle**. **The price per ton**, which is carrying the load **is different for each vehicle**:

        Up to **3 tons – minibus (200 euro per ton);**

        From **4 to 11 ton – truck (175 per ton);**

        **a dozen or more tons – train (120 Euro per ton).**

Your task is to calculate **the average price per ton of cargo carried**, as well as**the percentage of the tons carried by any vehicle in relation to the total weight (in ton) of all loads.**

### Login

From the console to read **a series of numbers, each on a separate line**:

        The **first line** – **the number of cargo**for carriage – **an integer in the range** **[1...1000]**

        For **each load**of a separate line – **tonnage of cargo**– **an integer in the range** **[1...1000]**

### Exit

To be printed on the console **4 rows** as follows:

        **The first row**– **the average price per tonne transported cargo (rounded to the second character** **after the decimal comma)**;

        **The second line**– **the percentage of**tonnes transported by **minibus (rate between 0.00% and 100.00% )**;

        **Third line**– **the percentage of** tonnes transported by **truck (rate between 0.00% and 100.00% )**;

        **The fourth line**– **the percentage of** tonnes transported by **train (rate between 0.00% and 100.00% )**.

### Sample input and output

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Login** | **Exit** | **Explanations** | **Login** | **Exit** |
| 4  1  5  16  3 | 143.80  16.00%  20.00%  64.00% | All goods 1 + 5 + 3 + 16 = 25 tonnes  (4 \* 5 \* 200 + 175 + 16 \* 120)/25 = **143.80** (per ton)  **By minibus**– 4/25\*100 = **16.00%**  **By truck**– 5/25\*100 = **20.00%**  **By train**– 16/25\*100 = **64.00%** | 5  2  10  20  1  7 | 149.38  7.50%  42.50%  50.00% |