# A test of "fundamentals of programming" – 18 December 2016

## Task 4. Reviewers

Write a program to **calculate statistics of the reviewers** of the examination. In the beginning, the program receives a **number of students** attended the exam for **each student his score**. In the end, the program should **print the percentage of students** with a score between **2.00 and 2.99**, between **3.00 and 3.99**, between **4.00 and 4.99**, **5.00 or more**. Also **the average mark** of the exam.

### Login

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

* The **first line** – **number of students attended the exam** – **an integer in the range** **[1...1000]**
* For **each student** on a separate line – **evaluation of the exam** - **a real number in the interval** **[2.00... 6.00]**

### Exit

To be printed on the console **5 lines** that contain the following information:

**Row 1-** **"Top students: {student success rate 5.00 or more}%"**

**Row 2-** **"Between 4.00 and 4.99: {between 4.00 and 4.99 including}%"**

**Line 3-** **"Between 3.00 and 3.99: {between 3.00 and 3.99 including}%"**

**4-Line** **"Fail: {less than 3.00}%"**

**Row 5-** **"Average: {Average}"**

All numbers must be **formatted to the second character** after the decimal point.

### Sample input and output

|  |  |  |
| --- | --- | --- |
| **Login** | **Exit** | **Explanations** |
| 10  3.00  2.99  5.68  3.01  4  4  6.00  4.50  2.44  5 | Top students: 30.00%  Between 4.00 and 4.99: 30.00%  Between 3.00 and 3.99: 20.00%  Fail: 20.00%  Average: 4.06 | 5 and more – three = 30% of 10  Between 4 and 4.99 – three = 30% of 10  Between 3 and 3.99 – two = 20% of 10  Under 3 – two = 20% of 10  The average: 3 + 2.99 + 5.68 + 3.01 + 4 + 4 + 6 + 4.50 + 2.44 + 5 = 40.62/ 10 = 4.062 |
| **Login** | **Exit** | |
| 6  2  3  4  5  6  2.2 | Top students: 33.33%  Between 4.00 and 4.99: 16.67%  Between 3.00 and 3.99: 16.67%  Fail: 33.33%  Average: 3.70 | |