# Programming Fundamentals and Unit Testing

# Regular Exam – 2 November 2024

Submit your solution here: [link](https://judge.softuni.org/Contests/Practice/Index/5158#1)

# 2. Temperature Categorization Based on Average

Write a program that:

* Reads an **array with** **daily temperatures (integer numbers separated by a single space)** from the console.
* **Calculates the average temperature from the input array**.
* **Separates** **the temperatures into two arrays**:
  + One for **temperatures less than the average temperature**.
  + One for **temperatures greater than or equal to the average temperature.**
* Prints both arrays on separate lines, with numbers separated by a single space.

### Example Input / Output

|  |  |  |
| --- | --- | --- |
| **Input** | **Output** | **Comments** |
| 15 20 35 40 25 30 | 15 20 25  35 40 30 | Total temperatures: 15, 20, 35, 40, 25, 30  Average temperature: (15+20+35+40+25+30) / 6 = 27.50  Temperatures less than average: 15, 20, 25  Temperatures greater than or equal to average: 35, 40, 30 |
| 10 15 20 25 30 35 | 10 15 20  25 30 35 | Total temperatures: 10, 15, 20, 25, 30, 35  Average temperature: (10+15+20+25+30+35) / 6 = 22.50  Temperatures less than average: 10, 15, 20  Temperatures greater than or equal to average: 25, 30, 35 |
| 12 15 28 | 12 15  28 | Total temperatures: 12, 15, 28  Average temperature: (12+15+28) / 3 = 18.33  Temperatures less than average: 10, 18  Temperatures greater than or equal to average: 28 |