

<https://brain-mentors.com>



<https://skillrisers.com>



Python Programming – Problem Solving Test

Duration: 30 Minutes

Total Marks: 30

Instructions:

1. Solve all 2 problems using Python.
 2. Write clean and readable code.
 3. Do not use external libraries unless mentioned.
 4. Input and output format must be followed strictly.
 5. Each problem carries 15 marks.
-

Problem 1: Student Marks Analyzer

You are given marks of **N** students.

Your task is to:

1. Calculate the average marks.
2. Find the highest and lowest marks.
3. Count how many students scored above the average.

Input Format

- First line: Integer **N** (number of students)
- Second line: **N** space-separated integers representing marks

Output Format

Print the following values on separate lines:

1. Average marks (rounded to 2 decimal places)
2. Highest marks
3. Lowest marks
4. Count of students scoring above average

Sample Input

```
5
60 70 80 90 50
```

Sample Output

```
70.00  
90  
50  
2
```

Problem 2: String Pattern Checker

You are given a string **S**.

Your task is to:

1. Check whether the string is a palindrome.
2. Count the number of vowels in the string.
3. Convert the string into title case.

Input Format

- A single line containing the string **S**

Output Format

Print the following on separate lines:

1. **Palindrome or Not Palindrome**
2. Number of vowels
3. Title case version of the string

Sample Input

```
level
```

Sample Output

```
Palindrome  
2  
Level
```

Evaluation Criteria

- Correctness of logic

- Code readability and structure
 - Handling edge cases
 - Proper input and output formatting
 - Efficient use of Python constructs
-

Good luck!