Exercise: Lambda and Built-In Functions

Problems for exercise and homework for the Python Advanced Course @SoftUni. Submit your solutions in the SoftUni judge system at https://judge.softuni.bg/Contests/1841

1. Sort Names

Write a program that receives a list of names, separated by space and prints the names sorted in descending order.

Example

| Input | Output |
|---------------------------|---------------------------|
| Gosho Stamat Pesho Stefan | Stefan Stamat Pesho Gosho |

2. Sort Numbers

Write a program that receives a list of strings. Keep the numbers, remove the names and check if the numbers are bigger than the initial length of the list. Then print the numbers in ascending order

Example

| Input | Output |
|----------------------------------|--------|
| nuGosho 7 10 St20amat Pesho 3 47 | 10 47 |

3. Multiplication

You will receive a number and a list of numbers. Multiply each number with the initial number and print the result.

Example

| Input | Output |
|----------------|----------------|
| 7 2 3 4 5 6 | 14 21 28 35 42 |

4. Sort

You will receive a list of numbers. Remove the positive numbers, sum the negative numbers and print the absolute value.

Example

| la a ut | 0 |
|---------|--------|
| Input | Output |
| | |











5. Whole Number

You will receive a list of numbers. Round every number and print the total sum multiplied by the length of the initial list.

Example

| Input | Output |
|---------------------|--------|
| 4.3 5.6 5.5 1.2 7.9 | 125 |

6. Unique Numbers

You will receive a list of numbers. Round the numbers, print the min and max and multiply the numbers by 3. Print only the unique numbers in ascending order separated by space.

Example

| Input | Output |
|----------------------------|----------------------|
| 7 9 15 432 1.2 0.2 0.5 1 6 | 0 |
| | 432 |
| | 0 3 18 21 27 45 1296 |

7. Unique Names

You will receive a list of names. Filter the bad names and print the total sum of the length of the names. A valid name is a name that starts with an uppercase letter and the rest is in lower case.

Example

| Input | Output |
|--|--------|
| Pesho Gosho staMaT PresLav Stefan Martin | 22 |

8. Negative vs Positive

You will receive a list of numbers. Separate the negative numbers from the positive. Find the total sum of the negatives and positives, replace the negative number with its absolute value and print the following:

If the absolute negative number is bigger than the positive number:

"The negatives are stronger than the positives"

If the positive number is bigger than the absolute negative number:

"The positives are stronger than the negatives"













Example

| Input | Output |
|----------------------------|---|
| 1 2 -3 -4 65 -98 12 57 -84 | -189 137 |
| | The negatives are stronger than the |
| | 137 The negatives are stronger than the positives |

9. Odd or Even

You will receive a command and a list of numbers:

If the command is "Odd": Print the sum of the Odd numbers multiplied by the length of the initial list.

If the command is "Even": Print the sum of the Even numbers multiplied by the length of the initial list.

Example

| Input | Output |
|--------------------------|--------|
| Odd | 490 |
| 1 3 5 34 7 9 12 11 13 10 | |















