Analyze List
Problem ID: a12p05analyzelist

Write a Python program that given a list l of integers > 0 prints out the following information:

1. The list l.

2. The sorted version of l.

3. A sorted list of the composite numbers in l (composite numbers are numbers that are not prime). The resulting list should only include each value once.

4. Minimum, maximum, and average values in l. The average value should be formatted to two decimal places.

The function `is_prime()` is given.

You need to print out an error message if the user enters invalid values into the list, and ask the user again for input until valid input is given.

Input

The input contains a list l.
If the list l contains invalid values then the program should ask for another list until a valid list is given. In the tests, l will be a list of length $1 \leq 1\,000$. The elements of the list will be integers or letters of the English alphabet.

In the samples below, each line of the input contains the elements of a list l seperated by commas, with the last line of the input being the valid list.

Output

The output should contain atleast 4 lines. First if the user input an invalid list the program should display.
"`Incorrect input!  Please try again.`" for every invalid input.
The next four lines of the output should contain:

1. "`Input list:  {`l`}`".

2. "`Sorted list:  {`l_{sorted}`}`" where l_{sorted} is the list l sorted.

3. "`Composite list:  {`$l_{composite}$`}`", where $l_{composite}$ is a list of composite numbers in l.

4. "`Min:  {`$l_{minimum\_value}$`}, Max:  {`$l_{maximum\_value}$`}, Average:  {`$l_{average\_value}$`}`"

Sample Input 1

```
2,5,7,2,8,10,34,23,9,4,5
```

Sample Output 1

```
Input list: [2, 5, 7, 2, 8, 10, 34, 23, 9, 4, 5]
Sorted list: [2, 2, 4, 5, 5, 7, 8, 9, 10, 23, 34]
Composite list: [4, 8, 9, 10, 34]
Min: 2, Max: 34, Average: 9.91
```

Sample Input 2

```
4,7,2,9,11,13,22,5,33,7,13
```

Sample Output 2

```
Input list: [4, 7, 2, 9, 11, 13, 22, 5, 33, 7, 13]
Sorted list: [2, 4, 5, 7, 7, 9, 11, 13, 13, 22, 33]
Composite list: [4, 9, 22, 33]
Min: 2, Max: 33, Average: 11.45
```

Sample Input 3	Sample Output 3
5,7,x 3, -4, 5, -6 2,8,8	Incorrect input! Please try again. Incorrect input! Please try again. Input list: [2, 8, 8] Sorted list: [2, 8, 8] Composite list: [8] Min: 2, Max: 8, Average: 6.00