Chapter 3 – Lists and Tuples

Objective:

Learn about lists and tuples data structures, their use and functions.

Relevant material:

Learn Python – Full Course for Beginners sections 11-13 (Lists to Tuples).

See also: *list() sort() tuple() append() pop() len()*

Assignment:

1. Using this list of numbers [2, 7, 3, 99, 43, 12, 56, 17], print it sorted (ascending) after removing its smallest and largest numbers.
   (Expected output: [3, 7, 12, 17, 43, 56].
2. **Challenge**: repeat assignment 1 but get the list of number from user. Use the give code to get list of 10 positive numbers from user.

```
numbers_list = []
max_list_len = 10
while len(numbers_list) < max_list_len:
    new_number = input(f"Enter number
({len(numbers_list)+1}/{max_list_len}): ")
    if new_number.isnumeric():
        numbers_list.append(float(new_number))
    else:
        print(f"{new_number} is not a positive number.")
```

3. Print last names of all the avengers in this list.
   [("Steve", "Rogers"), ("Tony", "Stark"), ("Natasha", "Romanoff"), ("Bruce", "Banner"), ("Clint", "Barton")]
4. **Challenge**: repeat assignment 3 using 1 print statement (Hint: use “for” loop).
5. Add ("Tony", "Banner") and ("Tony", "Rogers") to list and print all names (first and last) in alphabetically sorted order (sorted by first name).
6. **Challenge**: repeat assignment 5 but now sort names by **last** name.

Solutions:

Deliver a python script (.py file) with the code solving he above assignments.