1 Python: Homework 7

1.1

Get a list of numbers from the user and sort it using both the Bubble and Insertion Sort.

Count the number of operations for each loop and display it.

The Number of Operation for a loop = Number of Comparisons (conditions which comparison operators ->,<,<= and so on) + Number of Swapping (when a,b=b,a - values are swapped)

```
Output:

Enter a list: [2,13,4,10,2,9]

No of operations for Bubble Sort: 34

No of operations for Insertion Sort: 12
```

1.2

Get as an input a list containing tuples in the format: ("Name", "Category", Year) of Nobel Prize Winners and arrange them in alphabetically order of their last names using **Insertion Sort**.

```
Output:

Enter your input: [("Akira Suzuki", "Chemistry", 2010), ("Peter Handke", "

Literature", 2019), ("Theodore Roosevelt", "Peace", 1906), ("Albert

Einstein", "Physics", 1921), ("Robert Furchgott", "Medicine", 1998)]

Sorted List: [('Albert Einstein', 'Physics', 1921), ('Robert Furchgott', '

Medicine', 1998), ('Peter Handke', 'Literature', 2019), ('Theodore

Roosevelt', 'Peace', 1906), ('Akira Suzuki', 'Chemistry', 2010)]
```