Chapter 6 List Exercise

Time required: 90 minutes

- Comment each line of code as shown in the tutorials and other code examples.
- Follow all directions carefully and accurately.
- Think of the directions as minimum requirements.

Program Requirements

Write a program that asks the user to enter a list of 5 integers. Write the program such that the size of the list can be easily changed in one place.

Use a main function.

Do the following:

a) Print the total number of items in the list

b) Print the 4^{th} item

c) Print the last 2 items in the list

d) Print everything but the first 2 items in the list

e) Sort and print the list in reverse

f) Print the largest and smallest numbers in the list

g) Print the sum of the list

h) If the list contains a 5, print the element index. Otherwise, print no 5's in the list

i) Sort and print the list

j) Print the number of 5's in the list

k) Remove the first and last items from the list

l) Change the second to last item in the list to 9999

m) Add 55 to the end of the list

1. Create a Python program named **list_practice.py**

Example run:

```
Please enter 5  whole numbers:
Enter number 1: 3
Enter number 2: 5
Enter number 3: 5
Enter number 4: 7
Enter number 5: 23
(a) Number of items: 5
(b) Fourth item: 7
(c) Last 2 items: [7, 23]
(d) Everything but first 2 items: [5, 7, 23]
(e) Reversed: [23, 7, 5, 5, 3]
(f) Largest: 23   Smallest: 3
(g) Sum: 43
(h) First 5 is at: 2
(i) Now sorted: [3, 5, 5, 7, 23]
(j) How many 5's:  2
(k) After deleting first and last item: [5, 5, 7]
(l) After changing second-to-last item: [5, 9999, 7]
(m) After appending 55 to list: [5, 9999, 7, 55]
```

Assignment Submission

1. Attach the pseudocode.
2. Attach the program files.
3. Attach screenshots showing the successful operation of the program.
4. Submit in Blackboard.