

Aim:

Write a program to demonstrate working with lists in python.

Sample Test Case:

Input:

Enter a list of elements (separated by commas): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Output:

List of elements: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

Length of list: 10

Minimum value: 1

Maximum value: 10

Sum of values: 55

Sorted list: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

Source Code:

list.py

```
list_1=list(map(int,input("Enter a list of elements (separated by commas): ").split(","))
print(f"List of elements: {list_1}")
n=len(list_1)
max_num=max(list_1)
min_num=min(list_1)
sum=0
for i in range(0,n):
    sum+=list_1[i]
list_1.sort()
print(f"Length of list: {n}")
print(f"Minimum value: {min_num}")
print(f"Maximum value: {max_num}")
print(f"Sum of values: {sum}")
print(f"Sorted list: {list_1}")
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Enter a list of elements (separated by commas): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
List of elements: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
Length of list: 10
Minimum value: 1
Maximum value: 10
Sum of values: 55
Sorted list: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

Test Case - 2

User Output
Enter a list of elements (separated by commas): 3, 8, 2, 9, 5
List of elements: [3, 8, 2, 9, 5]
Length of list: 5
Minimum value: 2
Maximum value: 9
Sum of values: 27
Sorted list: [2, 3, 5, 8, 9]