**Lab#8**

Write a program to demonstrate The use of the len() function. Take a user input string and print its length.

**Input:**

User\_input = input(“Enter a string: “)

# Calculate the length of the input string using len() function

Length = len(user\_input)

# Print the length of the input string

Print(“Length of the input string:”, length)

**Q#2:** uses the max() and min() functions. Ask the user to input three numbers and find the Maximum and minimum values among them.

Input:

Num1 = float(input(“Enter the first number: “))

Num2 = float(input(“Enter the second number: “))

Num3 = float(input(“Enter the third number: “))

# Find the maximum and minimum values among the input numbers

Maximum = max(num1, num2, num3)

Minimum = min(num1, num2, num3)

# Print the maximum and minimum values

Print(“Maximum value:”, maximum)

Print(“Minimum value:”, minimum)

**Output:**

Enter the first number: Enter the second number: Enter the third number: Maximum value: 3.0

Minimum value: 1.0

**Q#3:** Implement a program that uses the sum() function to calculate the Sum of numbers in a given list.

**Input:**

Numbers = [5, 10, 15, 20, 25]

# Calculate the sum of numbers using the sum() function

Total\_sum = sum(numbers)

# Print the sum

Print(“Sum of numbers:”, total\_sum

**Output:**

Sum of numbers: 75

**Q#4:** Utilize the sorted() function to sort a list of integers provided by the user in ascending Order. Print the sorted.

**Input:**

Input\_numbers = input(“Enter a list of integers separated by spaces: “)

# Split the input string into a list of integers

Numbers = [int(x) for x in input\_numbers.split()]

# Sort the list of numbers in ascending order using the sorted() function

Sorted\_numbers = sorted(numbers)

# Print the sorted list

Print(“Sorted list in ascending order:”, sorted\_numbers)

**Q#5:** Use the abs() function to find the absolute value of a user-inputted number. Print the Result.

**Input:**

Input\_numbers = input(“Enter a list of integers separated by spaces: “)

# Split the input string into a list of integers

Numbers = [int(x) for x in input\_numbers.split()]

# Sort the list of numbers in ascending order using the sorted() function

Sorted\_numbers = sorted(numbers)

# Print the sorted list

Print(“Sorted list in ascending order:”, sorted\_numbers)

**Output:**

Enter a list of integers separated by spaces: Sorted list in ascending order: [2, 4, 6]

**Q#6:** Implement a program using the type() function to determine the data type of a user Inputted value.

**Input:**

# Take user input

User\_input = input(“Enter a value: “)

# Determine the data type of the user input using the type() function

Data\_type = type(user\_input)

# Print the data type of the user input

Print(“Data type of the input value:”, data\_type)

**Output:**

Enter a value: Data type of the input value: <class ‘str’>

**Q#7:** Use the format() function to format and print the current date in the “YYYY-MM-DD” Format.

**Input:**

From datetime import datetime

# Get the current date

Current\_date = datetime.now()

# Format the current date in “YYYY-MM-DD” format using the format() function

Formatted\_date = current\_date.strftime(“%Y-%m-%d”)

# Print the formatted date

Print(“Formatted current date:”, formatted\_date)

**Output:**

Formatted current date: 2024-02-20