**PYTHON LAB - Find the Greatest of Three Numbers**

**Objective**

The goal of this program is to determine the greatest among three user-provided numbers using the max() function.

**Program**

num1 = float(input("Enter the first number: "))

num2 = float(input("Enter the second number: "))

num3 = float(input("Enter the third number: "))

greatest = max(num1, num2, num3)

print("The greatest number is")

print(greatest)

**Explanation of Code**

1. **Input Handling (float(input(...))):**
   * The program starts by taking three numerical inputs from the user.
   * float(input("Enter the first number: ")) ensures that the input is treated as a floating-point number.
2. **Finding the Maximum Value (max(num1, num2, num3))**:
   * The max() function is used to determine the greatest of the three numbers.
3. **Printing the Result (print(greatest))**:
   * The greatest number is displayed using the print() function.

**Concepts Used in the Program**

* **User Input (input())**: Takes user input and converts it to a float.
* **Built-in Function (max())**: Determines the largest number among the three inputs.
* **Printing Output (print())**: Displays the greatest number.

**Example Execution**

**Input:**

Enter the first number: 7.5

Enter the second number: 3.2

Enter the third number: 9.8

**Processing:**

| **Number 1** | **Number 2** | **Number 3** | **Greatest** |
| --- | --- | --- | --- |
| 7.5 | 3.2 | 9.8 | 9.8 |

**Output:**

The greatest number is

9.8

**Alternative Approach Using Conditional Statements**

Instead of using max(), we can use conditional statements to determine the largest number:

num1 = float(input("Enter the first number: "))

num2 = float(input("Enter the second number: "))

num3 = float(input("Enter the third number: "))

if (num1 >= num2) and (num1 >= num3):

greatest = num1

elif (num2 >= num1) and (num2 >= num3):

greatest = num2

else:

greatest = num3

print("The greatest number is", greatest)

**Conclusion**

This program effectively demonstrates finding the greatest of three numbers using both the max() function and conditional statements. Understanding functions and conditionals is essential for decision-making in programming.