

Experiment 12: Create a function max_of_three that takes three numbers as arguments and returns the largest of them and also create a parameter function that checks whether a given number is Armstrong or not.

CODE:

```
def max_of_three(num1, num2, num3):
    "Returns the largest of three numbers"
    return max(num1, num2, num3)

def is_armstrong_number(number):
    "Returns True if the given number is an Armstrong number, False
    otherwise."
    # Convert the number to a string to find its length
    num_str = str(number)
    num_digits = len(num_str)

    # Calculate the sum of each digit raised to the power of the number
    # of digit
    armstrong_sum = sum(int(digit)**num_digits for digit in num_str)

    # Check if the sum is equal to the original number
    return armstrong_sum == number

# Example usage:

num1 = int(input("Enter first number: "))
num2 = int(input("Enter second number: "))
num3 = int(input("Enter third number: "))

# Find the maximum of three numbers
max_value = max_of_three(num1, num2, num3)
```

```
print(f"The maximum of {num1 }, {num2}, {num3} is:  
{max_value}")
```

```
# Check if a number is an Armstrong number
```

```
armstrong_num = int(input("Enter number to check Armstrong  
number: "))
```

```
print(f"{armstrong_num} is Armstrong:  
{is_armstrong_number(armstrong_num)}")
```

OUTPUT:

```
Enter first number: 152  
Enter second number: 72  
Enter third number: 255  
The maximum of 152, 72, 255 is: 255  
Enter number to check Armstrong number: 153  
153 is Armstrong: True
```