**Decorators in python :**

Application

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Graphical user interface, text, application

Description automatically generated

Graphical user interface, application

Description automatically generated

Now the challenge what if we do not have access to the function?

Or without changing the function can we swap the variables/values so that we can compare the two numbers and divide them accordingly?

User might not know how to pass the values-

We can do it with decorators – we can change the behavior of the existing function by creating a new function and calling the old function inside of it. This is also called functional programming.

Graphical user interface, text, application

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def div(a,b):

     print(a/b)

def div\_new(func):

    def inner(a,b):

        if a < b:

            a,b = b,a

        return func(a,b)

    return inner

div1 = div\_new(div)

div1(4,2)

**Modules**

Debugging is removing bugs

Coding is adding bugs

**A person wearing glasses

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Big project needs to be broken into small modules

**Graphical user interface, application, Word

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Let’s discuss about the inbuilt modules and and some modules we had imported.

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**Graphical user interface, text, application

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**We can try sub, multi,etc..**

[**https://www.programiz.com/python-programming/examples/largest-number-three**](https://www.programiz.com/python-programming/examples/largest-number-three)

num1 = 5

num2 = 5

num3 = 5

if num1 >= num2 and num1 >= num3:

    largest = num1

elif num2 >= num3 and num2 >= num1:

    largest = num2

else:

    largest = num3

print('The largest number is {}'.format(largest))

[**https://www.programiz.com/python-programming/examples/prime-number**](https://www.programiz.com/python-programming/examples/prime-number)

num = 4

flag = False

if num > 1:

    for i in range(2, num):

        if num % i == 0:

            flag = True

            break

if flag:

    print(num, 'is not a prime number')

else:

    print(num, 'is a prime number')

[**https://www.programiz.com/python-programming/examples/prime-number-intervals**](https://www.programiz.com/python-programming/examples/prime-number-intervals)

lower = 10

upper = 100

print('prime numbers between', lower , 'and ', upper)

for num in range(lower, upper + 1):

    if num > 1:

        for i in range(2, num):

            if num % i == 0:

                break

        else:

            print(num)