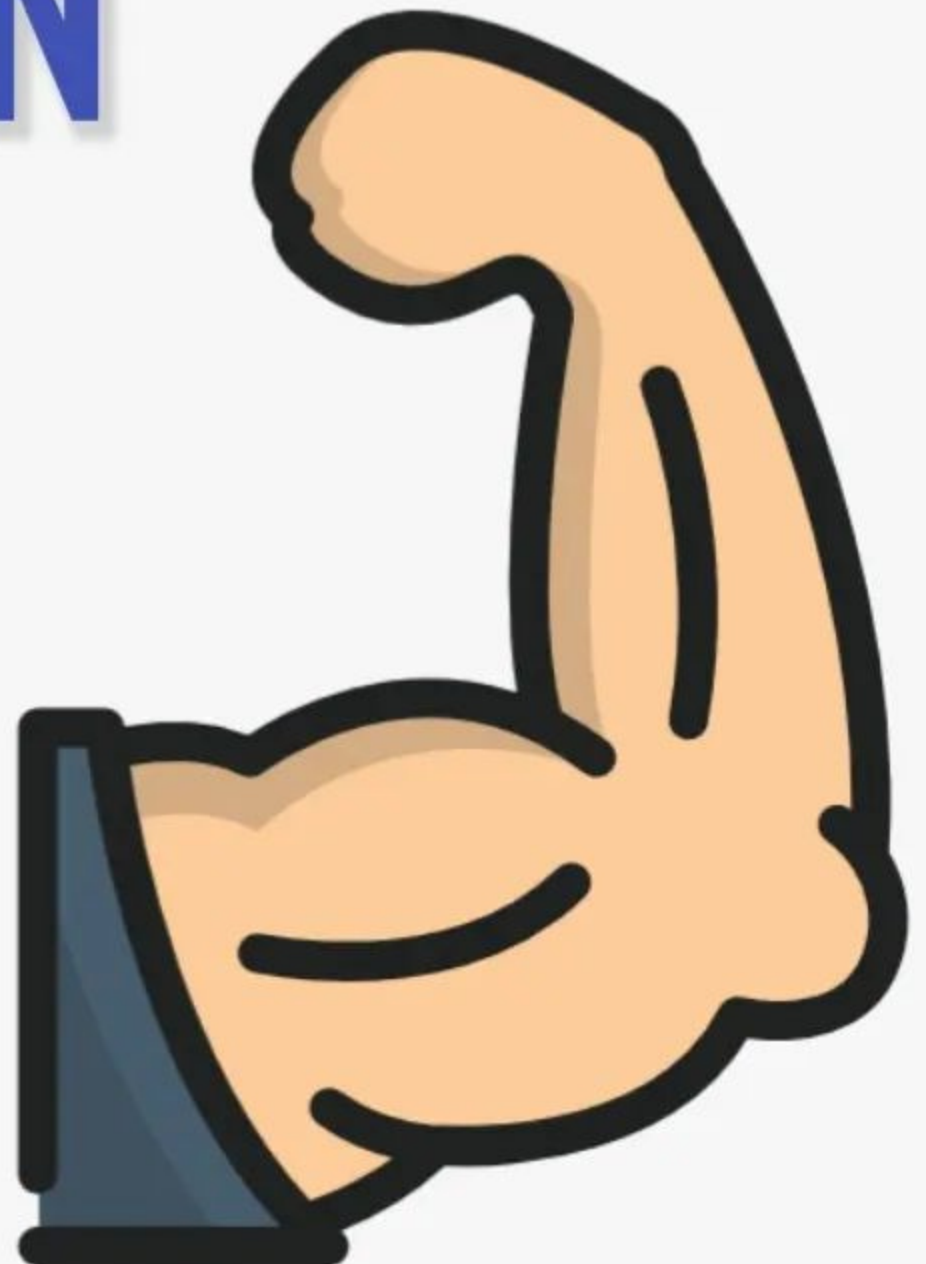


5 POWERFUL

FUNCTION

IN PYTHON



Filter Function:

The filter is a built-in Python function, which is useful when it is required to segregate any kind of data. It is used to extract or filter the data based on the given condition.

```
def is_positive(a):  
    return a>0  
output = list(filter(is_positive,[1,-2,3,-4,5,6]))  
print(output)
```

Lambda Function:

It is known as anonymous because we can instantiate and declare a function without a name.

If you have a single operation to be executed, the lambda function is extremely useful instead of declaring a traditional function. Lambda is similar to the function, except it can only return only one expression.

```
answer = lambda a, b: a**2 + b**2 + 2*(a+b)
print(answer(3, 6))
```


Map Function:

The map is a built-in Python function used by programmers to make the program simpler. This function iterates up on all the specified elements without the usage of any loops.

```
def add_list(a,b):  
    return a+b  
output = list(map(add_list,[2,6,3],[3,4,5]))  
print(output)
```

Reduce Function:

This function is used when it is required to apply the same operation to all the elements in the given list.

```
import functools
def sum_two_elements(a,b):
    return a+b

numbers = [6,2,1,3,4]
result = functools.reduce(sum_two_elements, numbers)
print(result)
```

Zip Function:

The zip is a built-in function that is used to extract data from different columns of the database and change it into a tuple.

```
user_id = ["12121", "56161", "33287", "23244"]
user_name = ["Mick", "John", "Tessa", "Nick"]
user_info = list(zip(user_name, user_id))
print(user_info)
```