

Function can take input values as parameters and executes business logic, and returns output to the caller with return statement.

- In Python, 'return ' is a keyword.
- Return is optional. You can write a function with or without a return statement.
- If you omit the return statement, by default, your function will return "None". This is called a void function.
- In Python, a function can return multiple values, but internally it will be a single object, i.e., a return statement with a comma-separated value will be a tuple object. We can achieve this by using list, set, or collection-based objects.

Try it yourself:

Example 1 :

```
def add(x,y):  
    return x+y  
  
result=add(10,20)  
print("Addition of 10 and 20 : ",result)  
print("The sum is",add(100,200))
```

Output:

Addition of 10 and 20 : 30

The sum is 300

Explanation:

- A function called add() is declared with two parameters, x and y.
- The value of arguments is added.
- The return statement returns the addition of the values.
- The add function is called with the arguments 10 and 20.
- The result of add(10,20) is stored in a variable. The print statement will print the value of the result.
- If you don't want to use the result further in your programme or you just want to display the result, you can directly call the function in the print function.

Function without Return statement

Try it yourself

```
def add(x,y):
    print(x+y)
result=add(10,20)
```

print(result)

Output:

30

None

Python Return Multiple Values

Try it yourself

Example:

```
def calc(x,y):
    add= x+y
    sub=x-y
    return x,y
```

```
result=calc(10,20)
print(result)
print(type(result))
```

Output:

(10, 20)

Difference between Return and Print Statement in function:

Return

Returns the value of a function as output.

The output of the function can be pass to other function. Output can not pass to other function.

Print()

Print the value of function on terminal.