

Functions with outputs

return is a keyword used to give output in a function

In [1]:

```
# Example

def my_function():

    result = 3 * 2

    return result    # output

my_function()
```

Out[1]:

6

Task

To write a program for asking user input as their first and last name. Use a function with output which gets the user input as input and returns the user name's first letter of first and last name as capital (title format) and others in lower cases

In [3]:

```
# Creating a function with 2 inputs

def format_name(f_name, l_name):

    # .title is used to format a string in title format

    result = f_name.title() + ' ' + l_name.title()

    return result    # Output for the fuction

first_name = input("enter your first name : ")

last_name = input("enter your last name : ")

print(f"title formatted name = {format_name(first_name, last_name)}")
```

```
enter your first name : aswin
enter your last name : MURALIDHARAN
title formatted name = Aswin Muralidharan
```

We can use multiple return statements inside if else condition.

Exercise

Built a calculator:

Sample output

What's the first number?: 5

+

-

*

/

Pick an operation: +

What's the next number?: 6

5.0 + 6.0 = 11.0

Type 'y' to continue calculating with 11.0, or type 'n' to start a new calculation: y

Pick an operation: /

What's the next number?: 2

11.0 / 2.0 = 5.5

Type 'y' to continue calculating with 5.5, or type 'n' to start a new calculation: n

In [11]:

```

def add(n1, n2):
    return n1 + n2

def subtract(n1, n2):
    return n1 - n2

def multiply(n1, n2):
    return n1 * n2

def divide(n1, n2):
    return n1 / n2

operations = {
    "+": add,
    "-": subtract,
    "*": multiply,
    "/": divide
}

def calculator():

    num1 = float(input("What's the first number?: "))
    for symbol in operations:
        print(symbol)
    should_continue = True

    while should_continue:
        operation_symbol = input("Pick an operation: ")
        num2 = float(input("What's the next number?: "))
        calculation_function = operations[operation_symbol]
        answer = calculation_function(num1, num2)
        print(f"{num1} {operation_symbol} {num2} = {answer}")

        if input(f"Type 'y' to continue calculating with {answer}, or type 'n' to start a new calculation: ") == 'y':
            num1 = answer
        else:
            should_continue = False
            clear()

calculator()

```

What's the first number?: 1

+
-
*
/

Pick an operation: +

What's the next number?: 6

1.0 + 6.0 = 7.0

Type 'y' to continue calculating with 7.0, or type 'n' to start a new calculation: y

Pick an operation: *

What's the next number?: 6

7.0 * 6.0 = 42.0

Type 'y' to continue calculating with 42.0, or type 'n' to start a new calculation: n