

Day 5 – FUNCTIONS

- A function is a set of statements that take inputs, do some specific computation and produces output. The idea is to put some commonly or repeatedly done task together and make a function, so that instead of writing the same code again and again for different inputs, we can call the function.

```
In [1]: def myFun(num):  
        num[0] = 20  
  
        list = [1, 2, 3, 4, 5]  
        myFun(list)  
        print(list) #list will be changed after the function call  
  
[20, 2, 3, 4, 5]
```

- A function is defined using the def keyword

```
In [2]: def my_function():  
        print("Hello from a function")
```

- Calling a function is easy as to call only the function name

```
In [3]: def my_function():  
        print("Hello from a function")
```

- Arguments are specified after the function name, inside the parentheses. You can add n number of arguments

```
In [4]: def csk(fname):  
        print('Player name is ' + fname)  
  
        csk("Dhoni")  
        csk("Raina")  
        csk("Sam")
```

```
Player name is Dhoni  
Player name is Raina  
Player name is Sam
```

A parameter is the variable listed inside the parentheses in the function definition.

An Argument is the value that is sent to the function when it is called.

- if your function expects 2 arguments, you have to call the function with 2 arguments, not more, and not less

```
In [5]: def ipl(csk_cap,rcb_cap):  
        print(csk_cap + ' VS ' + rcb_cap)  
  
        ipl("Dhoni",'Kohli')
```

Dhoni VS Kohli

- If you do not know how many arguments that will be passed into your function, add a * before the parameter name in the function definition.

```
In [6]: def my_function(*team):  
        print("The youngest member is " + team[0])  
  
        my_function("sam", "tom", "ben")
```

The youngest member is sam

- You can also send arguments with the key = value syntax & the order of the arguments does not matter.

```
In [7]: def my_function(child3, child2, child1):  
        print("The youngest child is " + child1)  
  
        my_function(child1 = "Sam", child2 = "Ben", child3 = "Tom")
```

The youngest child is Sam

- If you do not know how many keyword arguments that will be passed into your function, add two asterisk: ** before the parameter name in the function definition.

```
In [8]: def my_function(**players):  
        print("His last player is " + players["lplayer"])  
  
        my_function(fplayer = "Rayudu", lplayer = "Deepak")
```

His last player is Deepak

- To let a function return a value, use the return statement:

```
In [9]: def my_function(x):  
        return 5 * x  
        print(my_function(3))
```

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- passing a default value while initiation

```
In [10]: def csk(fname = 'Dhoni'):
          print('Captain for CSK is ' + fname)
          csk()
```

Captain for CSK is Dhoni

Exercise:

1) Create a function getting two integer inputs from user. & print the following:

Addition of two numbers is +value
Subtraction of two numbers is +value
Division of two numbers is +value
Multiplication of two numbers is +value

Here the value represents math function associated

```
In [11]: a = int(input("Enter the first no. "))
          b = int(input("Enter the second no. "))
          def calculations(x, y):
              print("Addition of two numbers is ", x+y)
              print("Subtraction of two numbers is ", x-y)
              print("Division of two numbers is ", x/y)
              print("Multiplication of two numbers is ", x*y)

          calculations(a, b)
```

Enter the first no.4
Enter the second no.1
Addition of two numbers is 5
Subtraction of two numbers is 3
Division of two numbers is 4.0
Multiplication of two numbers is 4

2) Create a function covid() & it should accept patient name, and body temperature, by default the body temperature should be 98 degree

```
In [15]: name = str(input('Enter Patient Name : '))
body_temperature = int(input('Enter Body Temperature : '))

def covid(name, temperature="98"):
    print("The name of patient is " + name)
    print("The body temperature of the patient is ", temperature)

covid(name, body_temperature)
covid(name)
```

```
Enter Patient Name : Aakanksha
Enter Body Temperature : 96
The name of patient is Aakanksha
The body temperature of the patient is 96
The name of patient is Aakanksha
The body temperature of the patient is 98
```

Completed Day 1's notes & exercises

THANK YOU!

Check out My Repository at https://github.com/AakankshaJarode/BestEnlist_Python_Internship.git
(https://github.com/AakankshaJarode/BestEnlist_Python_Internship.git)

Chech out My LinkedIn Page at <https://www.linkedin.com/in/aakanksha-jarode-1b0195179>
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