

## Functions

Functions is a block of code that can be reused in a program

```
def my_function() :           # Function definition
    print("Hello World")

my_function()                 # Function Call

    Hello World
```


### Parameter and Arguments:

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

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

```
# No of parameter and argument should be same
def my_function(fname, lname):
    print(fname + " " + lname)

my_function("Emil", "Refsnes")
```

 Emil Refsnes

```
# Factorial of a number(using loop)
number = int(input("Enter the number: "))

factorial = 1
if number == 0:
    print("The factorial of 0 is 1")
else:
    for i in range(1, number+1):           # range(1,6)= include 1 and exclude 6
        factorial = factorial*i
print("The factorial of {} is {}".format(number,factorial))

    Enter the number: 5
    The factorial of 5 is 120
```

```
# Factorial Function
def fact(num):
    factorial = 1
    if num == 0:
        return factorial
    else:
        for i in range(1, num+1):
            factorial = factorial*i
    return factorial

num = int(input("Enter the number: "))
fact(num)
```

Enter the number: 5  
120

```
fact(10)

    3628800
```