

## Higher Order Functions

Functions that take a function as an argument or return a function, is called Higher Order Function

```
#Ex 01
#Function as argument
def d1(para1):
    return "D1 Function", para1

def d2():
    return "D2 Function"

x = d1(d2())
print(x)
```

Output  
( 'D1 Function', 'D2 Function' )

```
#Ex 02
#Function as argument
def d1(para1, para2):
    return "D1 Function", para1, para2

def d2():
    return "D2 Function"

def d3():
    return "D3 Function"

x = d1(d2(),d3())
print(x)
```

Output  
( 'D1 Function', 'D2 Function', 'D3 Function' )

```
#Ex 03
# Return a Function Higher Order Function`s
def d1(a,b):
    def d2():
        return a+b
    return d2

x = d1(5,10)
print(x())

# 15
```

```
#Ex 04
# Return a Function Higher Order Function`s

def d1(a):
    def d2(b):
        return a+b
    return d2

d = d1(5)
print(d(10)) # 15
```