* Function as parameter.

- We can assign them to variable.
- We can pass them as parameter to other function.
- We can return them from function.

eg:-
```
def Square(x):
    return x * x

def cube(x):
    return (x * x * x)

def apply_fun (fun_name, num):
    return fun_name (num)
```

→ apply(Cube, 6)

Output → 2, 16

* Recursion function

It is a function that calls itself until a base condition is met.

eg:
```
def fact(n):
    if n == 1:
        return 1.
    else:
        return n * fact(n-1)
```
fact(5) Output -120.

* Nested function

Function defined inside another function.

Syntax: def outer_function(P1, P2 ... Pn):

    def inner_function(P1, P2 ... Pn):
        return value
    return value

* Lambda function

→ A lambda function is a small, anonymous function in Python
→ Defined using a keyword lambda instead of def.
→ It can take any number of arguments but must contain only one expression.
→ Expression is automatically returned.

Eg: S = lambda num: num * num.

S(4)

16.