

Functions in Python:

Functions are the set of code or instructions which performs specific tasks.

Types:

1. **In-built Functions:** These are the functions which are already defined inside the python
Ex: print(), int(), input(), etc.
2. **User defined functions:** These are the functions which are defined by the users based on their specifications.
We use **def** keyword to define the user defined functions in python.
Ex:

```
def add(a, b):  
    return a+b
```
3. **Lambda Functions:** lambda functions are the functions which doesn't have any name written in single line
We use **lambda** keyword to define lambda functions
Ex:

```
lambda x: x+2
```

Types of User Defined Functions:

1. **Functions with no parameter and no return value:**
Functions which don't take any parameter or input and return no values.
Ex:

```
def printName():  
    print("Hello world")
```
2. **Functions with parameter and no return value:**
These functions only take parameters but don't return any value.
Ex :

```
def greet(name):  
    print(f'Good Morning {name}')
```
3. **Functions with no parameter and with return value:**
These functions don't take any parameters but return some values.
Ex:

```
def grade():  
    return "A"
```
4. **Functions with parameter and with return value:**
These functions takes parameter also and returns values also
Ex:

```
def add(a, b):  
    return a+b
```

Note:

We can pass functions as a parameter

We can assign them into variables. Ex:

```
sum = lambda a,b: a+b
```