Date : 28th May 2021 **Hardik Savaliya**

:: Day - 4 ::

--Work Summary--

- **Today it was the Forth day of our Internship.**
- **Taken by : Devanshi Prajapati**

What we learnt ?

- On this day we learned the most important feature of any programming language which is also extended in Python too which is “Functions”
- In today’s session we get to know about moto behind usage of function which is to perform specific task of any program.
- Then we learned syntax of defining function in python programming language.
- Any function is divided in small parts
    1. “def” keyword
    2. Function name
    3. (arguments)
    4. “:” symbol
    5. Function “body”.
    6. Return statement (optional)
- We also learned about three different types of arguments which can be provided in python function
    1. Default arguments
    2. Keyword arguments
    3. Variable-Length arguments

- We perform all types of arguments program to understand well and this helps us in remembering for long time.
- Then after we get the information about Scope of variable which is mainly two typed 1
    1. Global Variable
    2. Local variable
- Variables that are defined inside a function body have a local scope, and those defined outside have a global scope.
- We also get the information about 'indentation error: expected an indented block'
- After that we get to know about module functionality of python programming.
- That are used to break down big programs in small ones as well as make program or project organized.
- We can define our most used functions in a module and import it, instead of copying their definitions into different programs. We also perform example program.
- Then we dived into operator world and get information about how may type of various operators exists in python programming language.
    1. Arithmetic
    2. Comparison
    3. Logical
    4. Assignment
    5. Membership
    6. Identity
- Arithmetic operators are used to perform arithmetic computing(add, subtract, multiply, Division etc…)
- Logical operators(and,or,not) are used to accomplish logical tasks.

- **Task : Perform all program performed in session**

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Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs> cd .\Tasks\
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks>  cd  .\task-4\
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-4> python func.py
----simple function----
hello
----function with arguments----
Hello World
----function with return----
a+b=30
---function with multiple return---
College = LDCE
Department = IT(7th sem)
---Default arguments---
default() : 30
default(4,5) : 9
---Keyword arguments---
keyargs(a=10,b=20) -10
keyargs(b=10,a=20) 10
---Var-length(non-keyword) arguments---
varlength(10,20) :  [10, 20]
varlength(10,20,30) :  [10, 20, 30]
varlength(10,20,30,40) :  [10, 20, 30, 40]
---Var-length(keyword) arguments---
varlengthk(car="BMW",price=2500000) ::: {'car': 'BMW', 'price': 2500000}
varlengthk(car="BMW",price=2500000,country="india") ::: {'car': 'BMW', 'price': 2500000, 'country': 'india'}
----Scope of Variable----
Value inside function :  10
value outside function: 20
----Module Function----
120
```

```
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs> cd .\Tasks\
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks>  cd  .\task-4\
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-4> python .\operators.py
------------------Operators--------------------
x: 10
y: 6
z: 20
lst: [10, 20, 30, 40, 50, 60, 'hello', 'Guys']
-----------------------------------------------
<-----Arithmetic operators----->
x+y= 16
x-y= 4
x*y= 60
x/y= 1.6666666666666667
x//y= 1
x%y= 4
<-----Comparision Operators----->
 x>y = True
 x<y = False
 x==y = False
 x>=y = True
 x<=y = False
 x!=y = True
<----Logical Operators---->
-----and-----
z is the largest
----or----
enter char:c
c  is consonant
<----Membership Opearator---->
x in lst: True
y in lst: False
y not in lst: True
<----Identity Opearator---->
x is y: False
x is not y: True
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-4>
```