

Functions in Python

Friday, August 19, 2022 10:13 AM

A

There are totally 2 function

1. User define function
2. Built in function

User define function

Example

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

these are commonly used in the code

Build in functions

A function already available in a language that we can directly use in our code

abs(): Returns the absolute value of a number

all(): Returns True if all items in an iterable object are true

any(): Returns True if any item in an iterable object is true

ascii(): Returns a readable version of an object and replaces non-ASCII characters with an 'escape' character

bin(): Returns the binary version of a number

bool(): Returns the Boolean value of a specified object

```

C:\Users\akshay.kanemoni>python
Python 3.9.5 (tags/v3.9.5:0a7dcdb, May  3 2021, 17:27:52) [MSC v.1928 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> abs(10.234)
10.234
>>> any("string")
True
>>> any(10)
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
TypeError: 'int' object is not iterable
>>> ascii("A")
"'A'"
>>> ascii(1)
'1'
>>> bin(1)
'0b1'
>>> bin("a")
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
TypeError: 'str' object cannot be interpreted as an integer
>>> bool("string")
True
>>>

```

The main difference between the ANY and the All is in all the series which we give everything should be true
In any there is no need the series things should all be true we can also give some false one

Lambda functions

Lambda Function

An anonymous function, i.e., a function having no name. A Lambda function cannot contain more than one expression

```

#Syntax
...
lambda arguments : expression
...

x = lambda a : a + 10
print(x(5))

```

There is also a facility where we can use a function in a lambda function

```
lambda.py > ...
1  def myfunc(n):
2      return lambda a: a+n
3  mySum = myfunc(3)
4  print(mySum(10))
```

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Windows PowerShell
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PS D:\akshay.kanemoni\OneDrive - Infosys Limited\Documents> python 9/python.exe "d:/akshay.kanemoni/OneDrive - Infosys Limited/lambda.py"
13
PS D:\akshay.kanemoni\OneDrive - Infosys Limited\Documents>

An another way to describe the lambda functions

```
5
6  r = lambda x,y:x*y
7  print(r(12,3))
8
```

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```
def createMultiplier(x):
    return lambda y: x * y

multiply = createMultiplier(10)

def execute(f, arg):
    print("Called F with " + str(arg))
    return f(arg)

print(execute(multiply, 15))
print(execute(multiply, 25))
```

Here f = multiply then f = args = multiply= y