Python Lambda Functions

A lambda function is a function without a name i.e. an anonymous function. The keyword lambda is used to define a lambda function in Python and has only a single expression.

Syntax of Lambda Functions

```
lambda arguments: expressions
```

The lambda function can have any number of arguments, but only one expression.

Examples of Lambda Functions

Following are some of the examples of the usage of Lambda Functions:

Example 1 – Multiplying a number to an argument with Python Lambda

```
val = lambda i: i *2
print("Result = ",val(25))
```

Output

```
Result = 50
```

Example 2 – Display a string with Python Lambda Functions

In this example, we will declare a string and display it with Lambda Functions.

```
# declaring a string
str ="Hello World!!!"

# displaying using lambda functions
(lambda str : print(str))(str)
```

Output

```
Hello World!!!
```

Example 3 – Lambda Functions with more than arguments

In this example, we will multiply 3 arguments with lambda functions.

```
# Multiplying 3 arguments with lambda
val = lambda i, j, k : i * j * k

# Display multiplication result of 3 arguments
print("Result = ",val(10, 20, 30))
```

Output

```
Result =  6000
```

Example 4 – Find the maximum of two numbers with Lambda Functions

In this example, we will use the if-else statement to display the maximum of two given numbers.

```
# finding the maximum number
res = lambda i, j : i if(i > j) else j

# displaying the result
print("Maximum = ",res(50, 100))
```

Output

```
Maximum =  100
```

```
Maximum =  100
```

Example 5 – Find the square of a number with Python Lambda Functions

```
# find square of a number
val = lambda i: i*i

# display the result
print("Result (square) = ",val(9))
```

Output

```
Result (square) =  81
```

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- Python Numbers
- Type Conversion
- Python Strings
- Python Lists
- Python DateTime