

Lambda

The lambda operator or lambda function is a way to create small anonymous functions, i.e. functions without a name. These functions are throw-away functions, i.e. they are just needed where they have been created. Lambda functions are mainly used in combination with the functions `filter()`, `map()` and `reduce()`. The lambda feature was added to Python due to the demand from Lisp programmers.

The general syntax of a lambda function is quite simple:

```
lambda argument_list: expression
```

The argument list consists of a comma separated list of arguments and the expression is an arithmetic expression using these arguments. You can assign the function to a variable to give it a name. The following example of a lambda function returns the sum of its two arguments:

```
f = lambda x, y : x + y
print(f(1,1))
```

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Use of Lambda Function

We use lambda functions when we require a nameless function for a short period of time.

In Python, we generally use it as an argument to a higher-order function (a function that takes in other functions as arguments). Lambda functions are used along with built-in functions like `filter()`, `map()` etc.

The map() Function
