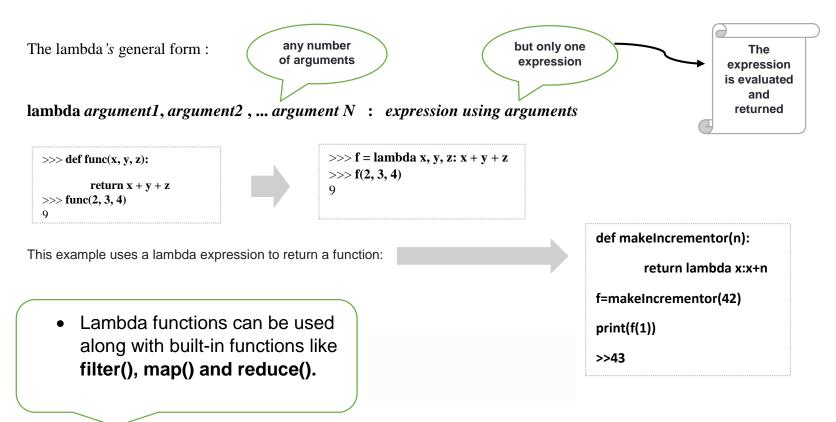
Lambda functions are used when:

- you need a function for a short period of time.
- you want to pass a function as an argument to higher-order functions.

The lambda operator cannot have any statements and it returns a function object that we can assign to any variable.



■ **Reduce** is a really useful function for <u>performing some computation on a list and returning the result</u>. It applies a rolling computation to sequential pairs of values in a list. For example, if you wanted to compute the product of a list of integers. So the normal way you might go about doing this task in python is using a basic for loop, but let's try it with reduce:

```
from functools import reduce
product = reduce((lambda x, y: x * y), [1, 2, 3, 4])
# Output: 24
```