

## Anonymous/ Lambda function

In python, anonymous function is a function that defined without a name.

while normal functions are defined using def keyword, in python anonymous function are defined using lambda keyword.

lambda function are used extensively along with built-in function like filter(), map().

syntax:

lambda argument: expression

```
double = lambda x: x*2
print(double(5))
```

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```
def double(x):
    return x*2
print(double(5))
```

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```
# Example use with Filter()
lst = [0,1,2,3,4,5,6,7,8,9,10,11,12]
even_lst = list(filter(lambda x:( x % 2 == 0),lst))  #
filter( function_name,sequence)
print(even_lst)
```

[0, 2, 4, 6, 8, 10, 12]

```
# Example use with map()
lst = [1,2,3,4,5,6,7,8]
new_lst = list(map(lambda x : x**3 ,lst))  # map(function_name,
sequence)
print(new_lst)
```

[1, 8, 27, 64, 125, 216, 343, 512]

```
# Example function with reduce()
```

```
from functools import reduce
```

```
lst = [1,2,3,4,5,6]
product_lst = reduce(lambda x , y : x*y,lst)
print(product_lst)
```

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