



Python Lambda

[< Previous](#)[Next >](#)

A lambda function is a small anonymous function.

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

Syntax

```
lambda arguments : expression
```

The expression is executed and the result is returned:

Example

[Get your own Python Server](#)

Add 10 to argument `a`, and return the result:

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

[Try it Yourself »](#)

Lambda functions can take any number of arguments:

Example

Multiply argument `a` with argument `b` and return the result:

```
x = lambda a, b : a * b
print(x(5, 6))
```

[Try it Yourself »](#)

Example

Summarize argument `a`, `b`, and `c` and return the result:

```
x = lambda a, b, c : a + b + c
print(x(5, 6, 2))
```

[Try it Yourself »](#)

Why Use Lambda Functions?



```
def myfunc(n):  
    return lambda a : a * n
```

Use that function definition to make a function that always doubles the number you send in:

Example

```
def myfunc(n):  
    return lambda a : a * n  
  
mydoubler = myfunc(2)  
  
print(mydoubler(11))
```

[Try it Yourself »](#)

Or, use the same function definition to make a function that always *triples* the number you send in:

Example

```
def myfunc(n):  
    return lambda a : a * n  
  
mytripler = myfunc(3)  
  
print(mytripler(11))
```

[Try it Yourself »](#)

Or, use the same function definition to make both functions, in the same program:

Example

```
def myfunc(n):  
    return lambda a : a * n  
  
mydoubler = myfunc(2)  
mytripler = myfunc(3)  
  
print(mydoubler(11))  
print(mytripler(11))
```

[Try it Yourself »](#)

Use lambda functions when an anonymous function is required for a short period of time.

Test Yourself With Exercises



[Tutorials](#)[Exercises](#)[Services](#)[Plus](#)[Spaces](#)[Get Certified](#)[Sign Up](#)[Log in](#)[CSS](#)[JAVASCRIPT](#)[SQL](#)[PYTHON](#)[JAVA](#)[PHP](#)[HOW TO](#)[W3.CSS](#)[C](#)[C++](#)[C#](#)[BOOTSTRAP](#)[REACT](#)[MYSQL](#)

Create a lambda function that takes one parameter (`a`) and returns it.

x =

[Submit Answer »](#)[Start the Exercise](#)[◀ Previous](#)[Next ▶](#)

W3schools Pathfinder
Track your progress - it's free!

[Sign Up](#)[Log in](#)

Data Analytics Program

Gain skills in Python, SQL, Data Science, R and Pandas.
Achieve 7 certifications.

[Start Today!](#)

COLOR PICKER

[SPACES](#)[UPGRADE](#)[AD-FREE](#)[NEWSLETTER](#)[GET CERTIFIED](#)[CONTACT US](#)

Top Tutorials

- [HTML Tutorial](#)
- [CSS Tutorial](#)
- [JavaScript Tutorial](#)
- [How To Tutorial](#)
- [SQL Tutorial](#)




Top References


- [HTML Reference](#)
- [CSS Reference](#)
- [JavaScript Reference](#)
- [SQL Reference](#)
- [Python Reference](#)

Top Examples

- [HTML Examples](#)
- [CSS Examples](#)
- [JavaScript Examples](#)
- [How To Examples](#)
- [SQL Examples](#)



Tutorials▼Exercises▼Services▼






Plus</> SpacesGet CertifiedSign UpLog in

CSSJAVASCRIPTSQLPYTHONJAVAPHPHOW TOW3.CSSCC++C#BOOTSTRAPREACTMYSQL

jQuery TutorialjQuery ReferencejQuery Examples

Get Certified

- HTML Certificate
- CSS Certificate
- JavaScript Certificate
- Front End Certificate
- SQL Certificate
- Python Certificate
- PHP Certificate
- jQuery Certificate
- Java Certificate
- C++ Certificate
- C# Certificate
- XML Certificate



FORUM ABOUT CLASSROOM

W3Schools is optimized for learning and training. Examples might be simplified to improve reading and learning. Tutorials, references, and examples are constantly reviewed to avoid errors, but we cannot warrant full correctness of all content. While using W3Schools, you agree to have read and accepted our [terms of use](#), [cookie and privacy policy](#).

Copyright 1999-2024 by Refsnes Data. All Rights Reserved. W3Schools is Powered by W3.CSS.

