

Lambda Functions

A **lambda function** in Python is a **small, anonymous function** that can take any number of arguments but can only have **one expression**. It is primarily used to **reduce code length** and improve **functionality** in cases where simple operations are required.

Syntax of Lambda Function

lambda arguments: expression

- The **arguments** are the values passed to the function.
- The **expression** is evaluated and returned.

Example

```
double = lambda x, y: x * y / x + 1  
print(double(1, 2)) # Output: 3.0
```

Why Use Lambda Functions?

- ✓ **Concise** – Reduces the need for defining regular functions.
- ✓ **Anonymous** – Can be used without a function name.
- ✓ **Quick Execution** – Useful in functional programming.