

# Functions()

A function in short, is a block of code that once defined, can be called on demand whenever needed. This saves time as the user will not have to write the same code repeatedly. There are two types of functions, namely - predefined functions and user defined functions.

## Predefined Functions

Predefined functions are - as the name suggests - predefined. They are built into Python and can be called without defining them. These functions exist in abundance and a list of a few of them can be found here: <https://data-flair.training/blogs/python-built-in-functions/>

## User Defined Functions

User defined functions again, as the name suggests, are defined by the user. These must be defined in the current Python file or in another one which must be imported to the current one.

The syntax for a user defined function is something like this:

```
1 def my_function():  
2     """Your code here"""
```

Functions in Python can also take arguments and don't require you to mention the data type of the argument in the function's definition:

```
1 def my_function(arg1,arg2):  
2     """Your code here"""
```

A sample function that returns the sum of two numbers can be defined as:

```
1 def sum(a,b):  
2     return a + b
```

Please note that while Python doesn't require you to have to use semicolons at the end of each line, it does require you to indent all the lines properly. This means all the lines belonging to the block of code that comes under the function must be at the same, or a higher indentation level.

You can read in more detail about user defined functions over here:

<https://www.codementor.io/kaushikpal/user-defined-functions-in-python-8s7wyc8k2>