

Python Function Docstrings

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Summary: in this tutorial, you'll learn about how to use docstrings to add documentation to a function.

Introduction to the help() function

Python provides a built-in function called `help()` that allows you to show the documentation of a [function](https://www.pythontutorial.net/python-basics/python-functions/) .

The following example shows the documentation of the `print()` function:

```
help(print)
```

Output:

```
print(...)  
    print(value, ..., sep=' ', end='\n', file=sys.stdout, flush=False)
```

Prints the values to a stream, **or** to `sys.stdout` by default.

Optional keyword arguments:

```
file:  a file-like object (stream); defaults to the current sys.stdout.  
sep:   string inserted between values, default a space.  
end:   string appended after the last value, default a newline.  
flush: whether to forcibly flush the stream.
```

Note that you can use the `help()` function to show the documentation of [modules](https://www.pythontutorial.net/python-basics/python-module/) (<https://www.pythontutorial.net/python-basics/python-module/>) , [classes](https://www.pythontutorial.net/python-oop/python-class/) (<https://www.pythontutorial.net/python-oop/python-class/>) , [functions](https://www.pythontutorial.net/python-basics/python-functions/) (<https://www.pythontutorial.net/python-basics/python-functions/>) , and keywords. This tutorial focuses on function documentation only.

Using docstrings to document functions

To document your functions, you can use docstrings. The [PEP 257](https://www.python.org/dev/peps/pep-0257/) (<https://www.python.org/dev/peps/pep-0257/>) provides the docstring conventions.

When the first line in the function body is a string, Python will interpret it as a docstring. For example:

```
def add(a, b):  
    "Return the sum of two arguments"  
    return a + b
```

And you can use the `help()` function to find the documentation of the `add()` function:

```
help(add)
```

Output:

```
add(a, b)  
    Return the sum of two arguments
```

Typically, you use multi-line docstrings:

```
def add(a, b):  
    """ Add two arguments  
    Arguments:  
        a: an integer  
        b: an integer  
    Returns:  
        The sum of the two arguments  
    """  
    return a + b
```

Output:

```
add(a, b)  
Add the two arguments  
Arguments:  
    a: an integer  
    b: an integer  
Returns:  
    The sum of the two arguments
```

Python stores the docstrings in the `__doc__` property of the function.

The following example shows how to access the `__doc__` property of the `add()` function:

```
add.__doc__
```

Summary

- Use the `help()` function to get the documentation of a function.
- Place a string, either single-line or multi-line strings, as the first line in the function to add documentation to it.