



Python Modules

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

What is a Module?

Consider a module to be the same as a code library.

A file containing a set of functions you want to include in your application.

Create a Module

To create a module just save the code you want in a file with the file extension `.py`:

Example

[Get your own Python Server](#)

Save this code in a file named `mymodule.py`

```
def greeting(name):  
    print("Hello, " + name)
```

Use a Module

Now we can use the module we just created, by using the `import` statement:

Example

Import the module named mymodule, and call the greeting function:

```
import mymodule  
  
mymodule.greeting("Jonathan")
```

[Run Example »](#)

Note: When using a function from a module, use the syntax: `module_name.function_name`.

Variables in Module

The module can contain functions, as already described, but also variables of all types (arrays, dictionaries, objects etc):

Example

Save this code in the file `mymodule.py`





```
}  
}
```

Example

Import the module named mymodule, and access the person1 dictionary:

```
import mymodule  
  
a = mymodule.person1["age"]  
print(a)
```

[Run Example »](#)

Naming a Module

You can name the module file whatever you like, but it must have the file extension `.py`

Re-naming a Module

You can create an alias when you import a module, by using the `as` keyword:

Example

Create an alias for `mymodule` called `mx`:

```
import mymodule as mx  
  
a = mx.person1["age"]  
print(a)
```

[Run Example »](#)

Built-in Modules

There are several built-in modules in Python, which you can import whenever you like.

Example

Import and use the `platform` module:

```
import platform  
  
x = platform.system()  
print(x)
```

[Try it Yourself »](#)

Using the dir() Function



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

Example

List all the defined names belonging to the platform module:

```
import platform

x = dir(platform)
print(x)
```

[Try it Yourself »](#)

Note: The `dir()` function can be used on *all* modules, also the ones you create yourself.

Import From Module

You can choose to import only parts from a module, by using the `from` keyword.

Example

The module named `mymodule` has one function and one dictionary:

```
def greeting(name):
    print("Hello, " + name)

person1 = {
    "name": "John",
    "age": 36,
    "country": "Norway"
}
```

Example

Import only the `person1` dictionary from the module:

```
from mymodule import person1

print (person1["age"])
```

[Run Example »](#)

Note: When importing using the `from` keyword, do not use the module name when referring to elements in the module. Example:

`person1["age"]`, not `mymodule.person1["age"]`

Test Yourself With Exercises

Exercise:

What is the correct syntax to import a module named "mymodule"?



[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](#)[Submit Answer »](#)[Start the Exercise](#)[← Previous](#)[Next >](#)

W3schools Pathfinder
Track your progress - it's free!

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

COLOR PICKER

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

Top Tutorials

- [HTML Tutorial](#)
- [CSS Tutorial](#)
- [JavaScript Tutorial](#)
- [How To Tutorial](#)
- [SQL Tutorial](#)
- [Python Tutorial](#)
- [W3.CSS Tutorial](#)
- [Bootstrap Tutorial](#)
- [PHP Tutorial](#)
- [Java Tutorial](#)
- [C++ Tutorial](#)
- [jQuery Tutorial](#)

[Get Certified](#)




Top References


- [HTML Reference](#)
- [CSS Reference](#)
- [JavaScript Reference](#)
- [SQL Reference](#)
- [Python Reference](#)
- [W3.CSS Reference](#)
- [Bootstrap Reference](#)
- [PHP Reference](#)
- [HTML Colors](#)
- [Java Reference](#)
- [Angular Reference](#)
- [jQuery Reference](#)

Top Examples

- [HTML Examples](#)
- [CSS Examples](#)
- [JavaScript Examples](#)
- [How To Examples](#)
- [SQL Examples](#)
- [Python Examples](#)
- [W3.CSS Examples](#)
- [Bootstrap Examples](#)
- [PHP Examples](#)
- [Java Examples](#)
- [XML Examples](#)
- [jQuery Examples](#)








Tutorials▼Exercises▼Services▼

Plus</> Spaces Get CertifiedSign UpLog in

CSSJAVASCRIPTSQLPYTHONJAVAPHPHOW TOW3.CSSCC++C#BOOTSTRAPREACTMYSQL

PHP Certificate
jQuery Certificate
Java Certificate
C++ Certificate
C# Certificate
XML Certificate



FORUMABOUTCLASSROOM

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.

