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Oct. 01, 2012

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How to use sys.argv in Python

What is sys.argv?

`sys.argv` is a list in Python, which contains the command-line arguments passed to the script.

With the `len(sys.argv)` function you can count the number of arguments.

If you are gonna work with command line arguments, you probably want to use `sys.argv`.

To use `sys.argv`, you will first have to import the `sys` module.

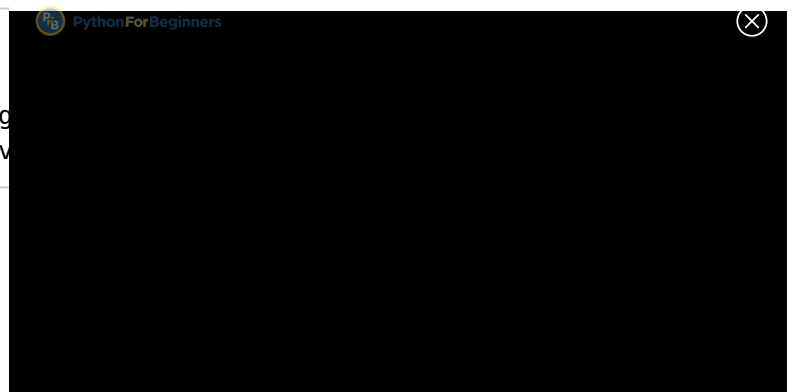


Example

To show how this works.

(Remember that `sys.argv[0]` is the name of the script.

```
import sys
print "This is the name of the script: ",
print "Number of arguments: ", len(sys.argv)
print "The arguments are: " , str(sys.argv)
```



Output

```
This is the name of the script: sysargv.py  
Number of arguments in: 1  
The arguments are: ['sysargv.py']
```

If I run it again with additional arguments, I will get this output:

```
This is the name of the script: sysargv.py  
Number of arguments in: 3  
The arguments are: ['sysargv.py', 'arg1', 'arg2']
```

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Name

Danial Akbari • 9 months ago

what about named arguments?

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Bhanu • 9 months ago

"I run it again with additional arguments" what is that?

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Aaron Limoges ➔ Bhanu • 9 months ago

What the author is referring to is the ability of sys argv to pull inputs from the command line. For example, if you were to save the code in the article as "[script.py](#)" and run it in a command line/terminal by typing "python [script.py](#)", the output of the script in the terminal would tell you that there is only one argument, which in this case is the name of the script. Where this utility comes in handy is, say, if you want to use a python script to process another file. Then you could type something like "python [script.py](#) filename", and the entry "filename" is considered another argument that your python script can work with. So in the first instance, running "python [script.py](#)", there is just one argument ([script.py](#)), whereas in the second instance if you run "python [script.py](#) filename", there are two arguments ([script.py](#) and filename). Hopefully this helps!

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CK ➔ Bhanu • 9 months ago

it means he ran it as
python [sysargv.py](#) arg1 arg2

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Kolby Owens ➔ CK • 4 months ago

And how does one do that??^

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[Show more replies](#)**Prameela** • 4 months ago

when I run it, I am getting -f for the sys.argv[0]. Why is that?

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Simon Jones ➔ Prameela • a month ago

Unusually for programming, it starts 1,2 not 0,1. the first argument is sys.argv[1]

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KimLetkeman ➔ Simon Jones • a month ago

No, that's not unusual ... all languages that support argv (which comes from C or even earlier in unix I believe) use argv[0] as name of executable and 1.. as index of args ...

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Kaveen Marasinghe Arachchige — elaa

静谧的松树林 — It is not the result I wanted. Not only the host address but also the dns server address, just like the `nslookup` does。

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1 comment • 10 months ago

dan — you need a () after print. ex: print (' the area is:' , area)

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ARoy — With the latest python (3.7) the below code works. You should have used choice not shuffle.import ...

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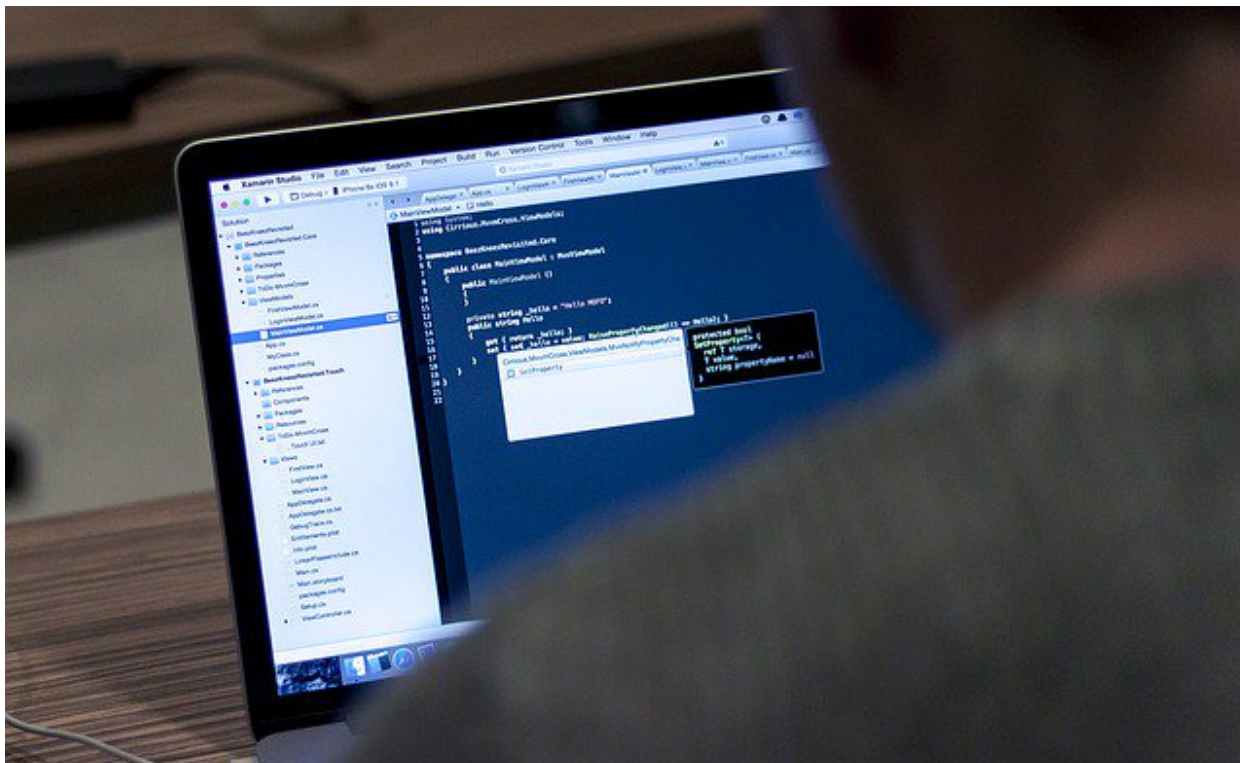


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