

Writing Python Scripts

Spoken Tutorial Project

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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Objectives

In this tutorial we will learn,



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- ▶ **Understand what is importing.**



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- ▶ **Write your own Python modules.**



Objectives

In this tutorial we will learn,

- ▶ Understand what is importing.
- ▶ Write your own Python modules.
- ▶ Understand the `__name__ == "__main__"` idiom



System Specifications



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- ▶ **Ubuntu Linux 14.04**



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- ▶ **Python 2.7.6**



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- ▶ **Ubuntu Linux 14.04**
- ▶ **Python 2.7.6**
- ▶ **IPython 4.0.0**



Pre-requisite

To practise this tutorial, you should know how to

- ▶ run basic Python commands on the ipython console.
- ▶ use python modules

If not, see the pre-requisite Python tutorials on <http://spoken-tutorial.org>



GCD

```
def gcd(a, b):  
    while b:  
        a, b = b, a%b  
    return a  
if gcd(40, 12) == 4:  
    print "Everything OK"  
else:  
    print "The GCD function is wrong"
```



__name__ variable

```
if __name__ == "__main__":
```



`__name__` variable

- ▶ The `__name__` variable is local to every module.
- ▶ It is equal to `__main__` only when the file is run as a script.



Summary

In this tutorial, we have learnt to,

- ▶ **Know what happens when we import a module.**



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- ▶ **Use a script as a module.**



Summary

In this tutorial, we have learnt to,

- ▶ Know what happens when we import a module.
- ▶ Use a script as a module.
- ▶ Write test functions using the “`__name__`” idiom.



Evaluation

1. Which of the following variables contains the locations to search for python modules



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- ▶ `sys.pythonpath`
- ▶ `sys.path`
- ▶ `os.pythonpath`
- ▶ `os.path`



Evaluation

1. Which of the following variables contains the locations to search for python modules
 - ▶ `sys.pythonpath`
 - ▶ `sys.path`
 - ▶ `os.pythonpath`
 - ▶ `os.path`
2. A module should contain only one function.
 - ▶ True
 - ▶ False



Solutions

1. `sys.path`



Solutions

1. `sys.path`

2. `False`



Forum to answer questions

- ▶ Do you have questions in **THIS Spoken Tutorial?**
- ▶ Choose the minute and second where you have the question.
- ▶ Explain your question briefly.
- ▶ Someone from the **FOSSEE** team will answer them. Please visit

<http://forums.spoken-tutorial.org/>



Forum to answer questions

- ▶ Questions not related to the Spoken Tutorial?
- ▶ Do you have general / technical questions on the Software?
- ▶ Please visit the FOSSEE Forum
<http://forums.fossee.in/>
- ▶ Choose the Software and post your question.



Textbook Companion Project

- ▶ The FOSSEE team coordinates coding of solved examples of popular books
- ▶ We give honorarium and certificate to those who do this

For more details, please visit this site:

<http://tbc-python.fossee.in/>



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- ▶ More information on this Mission is available at:

<http://spoken-tutorial.org/NMEICT-Intro>



THANK YOU!

For more Information, visit our website
<http://fossee.in/>

