

Getting started with IPython

Spoken Tutorial Project

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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Objectives

At the end of this tutorial, you will be able to,



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- ▶ **invoke the IPython interpreter**



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- ▶ **quit the IPython interpreter**



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At the end of this tutorial, you will be able to,

- ▶ **invoke the IPython interpreter**
- ▶ **quit the IPython interpreter**
- ▶ **navigate the IPython session history**



Objectives

- ▶ **use tab-completion within IPython**



Objectives

- ▶ use tab-completion within IPython
- ▶ look-up documentation in IPython



Objectives

- ▶ use tab-completion within IPython
- ▶ look-up documentation in IPython
- ▶ interrupt incomplete or incorrect commands



System Specifications



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- ▶ **Ubuntu Linux 14.04**



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- ▶ **Python 3.5.2**



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- ▶ **Ubuntu Linux 14.04**
- ▶ **Python 3.5.2**
- ▶ **IPython 5.1.0**



What is IPython?

- ▶ **IPython is an enhanced interactive Python interpreter.**



What is IPython?

- ▶ IPython is an enhanced interactive Python interpreter.
- ▶ It provides features like tab-completion, and easier access to help.



Exercise 1

1. find out the commands starting with `ab`



Exercise 1

1. find out the commands starting with **ab**
2. list out the commands starting with **a**



Exercise 2

Look-up the documentation of `round` and see how to use it



Exercise 3

Check the output of

```
round(2.48)
```

```
round(2.48, 1)
```

```
round(2.484)
```

```
round(2.484, 2)
```



Solution 3

`round(2.48)` = 2.0

`round(2.48, 1)` = 2.5

`round(2.484)` = 2.0

`round(2.484, 2)` = 2.48



Exercise 4

1. Type `round(2.484)` and press Enter
2. Then cancel the command using `Ctrl + C`



Exercise 4

1. Type `round(2.484` and press Enter
2. Then cancel the command using `Ctrl + C`
3. Type the command,
`round(2.484, 2)`



Summary

- ▶ invoke the IPython interpreter by typing `ipython` in the terminal.



Summary

- ▶ invoke the IPython interpreter by typing `ipython` in the terminal.
- ▶ quit the IPython interpreter by using `Ctrl + D`.



Summary

- ▶ invoke the IPython interpreter by typing `ipython` in the terminal.
- ▶ quit the IPython interpreter by using `Ctrl + D`.
- ▶ navigate IPython session history by using the arrow keys.



Summary

- ▶ use tab-completion to work faster.



Summary

- ▶ **use tab-completion to work faster.**
- ▶ **see the documentation of functions using question mark.**



Summary

- ▶ use tab-completion to work faster.
- ▶ see the documentation of functions using question mark.
- ▶ interrupt commands using `Ctrl + C` when we make an error.



Assignment

1. IPython is a programming language similar to Python.
 - ▶ True or False



Assignment

1. IPython is a programming language similar to Python.
 - ▶ True or False
2. Which key combination quits IPython?
 - ▶ Ctrl + C
 - ▶ Ctrl + D
 - ▶ Alt + C
 - ▶ Alt + D



Assignment

3. Which character is used at the end of a command, in IPython to display the documentation.

- ▶ under score (_)
- ▶ question mark (?)
- ▶ exclamation mark (!)
- ▶ ampersand (&)



Solutions

1. **False**
2. **Ctrl + D**
3. **question mark (?)**



About the Spoken Tutorial Project

- ▶ Watch the video available at http://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- ▶ It summarises the Spoken Tutorial project



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The Spoken Tutorial Project Team

- ▶ Conducts workshops using spoken tutorials
- ▶ Gives certificates to those who pass an online test
- ▶ For more details, please write to contact@spoken-tutorial.org



Forum to answer questions

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

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



Forum to answer questions

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<http://forums.fossee.in/>
- ▶ Choose the Software and post your question.



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- ▶ 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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- ▶ **It is supported by the National Mission on Education through ICT, MHRD, Government of India**
- ▶ **More information on this Mission is available at:**

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



THANK YOU!

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