

# Getting Started with Tuples

**Spoken Tutorial Project**

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

**National Mission on Education through ICT**

**<http://sakshat.ac.in>**

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# Objectives

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In this tutorial we will learn,

- ▶ Understand what `tuples` are.



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- ▶ Compare them with `lists`.



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In this tutorial we will learn,

- ▶ Understand what `tuples` are.
- ▶ Compare them with `lists`.
- ▶ Know why they are needed and where to use them.



# System Specifications



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- ▶ **Ubuntu Linux 14.04**



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- ▶ **Ubuntu Linux 14.04**
- ▶ **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 Lists

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



# Exericse 1

**Given,  $a = 5$  and  $b = 7$ . Swap the values of  $a$  and  $b$ .**



# Summary

**In this tutorial, we have learnt to,**

- ▶ **Define tuples.**



# Summary

In this tutorial, we have learnt to,

- ▶ Define `tuples`.
- ▶ Understand the similarities of `tuples` with `lists`, like indexing and iterability.



# Summary

- ▶ Know about the immutability of tuples.



# Summary

- ▶ Know about the immutability of tuples.
- ▶ Swap values, the python way.



# Summary

- ▶ Know about the immutability of tuples.
- ▶ Swap values, the python way.
- ▶ Understand the concept of packing and unpacking of tuples.





# Evaluation

1. Define a tuple containing two values. The first being integer 4 and second is a float 2.5



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  - ▶ `int`
  - ▶ `float`
  - ▶ `tuple`
  - ▶ `string`



# Evaluation

3. If  $a = (2, 3)$ ,

What does

$a[0], a[1] = (3, 4)$

produce ?



# Solutions

1. `(4, 2.5)`

2. `tuple`

3. `Error`



# 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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- ▶ 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!

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

