

Getting Started with Lists

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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- ▶ **Create lists**



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- ▶ **Append elements to lists**
- ▶ **Delete elements from lists**



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-requisites

To practise this tutorial, you should know how to

- ▶ run basic Python commands on the ipython console

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



Lists

- ▶ **List is a compound data type, it can contain data of mutually different datatypes.**



Lists

- ▶ **List is a compound data type, it can contain data of mutually different datatypes.**
- ▶ **List is also a sequence data type where all the elements are arranged in a specific order.**



Exercise 1

- ▶ What happens when you do `nonempty[-1]`.



Exercise 2

1. What is the syntax to get the element 'and' in the list, listinlist ?



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2. How would you get 'and' using negative indices?
3. How would you get element '4' from the list listinlist?



Solution 2

1. `listinlist[1]`
2. `listinlist[-5]`
3. `listinlist[0][3]`



Exercise 3

1. Remove the third element from the list, `listinlist`.



Exercise 3

1. Remove the third element from the list, `listinlist`.
2. Remove 'and' from the list, `listinlist`.



Solution 3

1. `del listinlist[2]`
2. `listinlist.remove('and')`



Summary

In this tutorial we have learnt to,

- ▶ Create lists



Summary

In this tutorial we have learnt to,

- ▶ **Create lists**
- ▶ **Access lists using their index numbers.**



Summary

In this tutorial we have learnt to,

- ▶ Create lists**
- ▶ Access lists using their index numbers.**
- ▶ Append elements to list using the function append.**



Summary

- ▶ **Delete Element from lists by specifying the index number of the element to be deleted in the del function.**



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- ▶ **Delete Element from lists by specifying the index number of the element to be deleted in the del function.**
- ▶ **Delete element from list by content using remove function.**



Summary

- ▶ **Delete Element from lists by specifying the index number of the element to be deleted in the del function.**
- ▶ **Delete element from list by content using remove function.**
- ▶ **Find out the list length using len function.**



Evaluation

1. How do you create an empty list ?



Evaluation

1. How do you create an empty list ?
2. Can you have a list inside a list ?



Evaluation

1. How do you create an empty list ?
2. Can you have a list inside a list ?
3. How would you access the last element of a list without finding its length?



Solutions

1. `empty=[]`



Solutions

1. `empty=[]`
2. Yes we can have list inside list



Solutions

1. `empty= []`
2. Yes we can have list inside list
3. Use negative index to access the last element of the list



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/>

