

# Manipulating strings

**Spoken Tutorial Project**

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

**National Mission on Education through ICT**

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

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**19 November 2015**



# Objectives

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



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- ▶ **Slice strings and get sub-strings out of them.**



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

- ▶ **Slice strings and get sub-strings out of them.**
- ▶ **Reverse strings.**



# Objectives

- ▶ **Replace characters in strings.**



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- ▶ **Replace characters in strings.**
- ▶ **Convert strings to upper or lower case.**



# Objectives

- ▶ **Replace characters in strings.**
- ▶ **Convert strings to upper or lower case.**
- ▶ **Join a list elements to form a string.**

# 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 practice this tutorial, you should know how to -**



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To practice this tutorial, you should know how to -

- ▶ use strings, lists and basic datatypes



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To practice this tutorial, you should know how to -

- ▶ use strings, lists and basic datatypes

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



# string slicing

- ▶ **String slicing allows us to obtain sub-strings.**



# string slicing

- ▶ **String slicing allows us to obtain sub-strings.**
- ▶ **Syntax:**  
**string\_name[start: stop: [step]]**





# Assignment 1

- ▶ Obtain the sub-string excluding the first and last characters from the string `s`.



# Assignment 2

- ▶ Check if each element in list `['SATURDAY', 'Saturday']` is present in the list `week`.



# Assignment 3

- ▶ Replace the [dot] with symbol '.' in email



# Assignment 4

- ▶ From the `email_str` that we generated, change the separator to be a semicolon instead of a comma.



# Summary

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

- ▶ **Obtain sub-strings**



# Summary

In this tutorial, we have learnt to,

- ▶ Obtain sub-strings
- ▶ Reversing strings by using the index numbers



# Summary

- ▶ Use following functions -



# Summary

- ▶ **Use following functions -**
  - ▶ **upper ()** – to obtain the upper case of a string





# Summary

- ▶ **Use following functions -**
  - ▶ **upper ()** – to obtain the upper case of a string
  - ▶ **lower ()** – to obtain the lower case of a string



# Summary

- ▶ **Use following functions -**
  - ▶ **upper()** – to obtain the upper case of a string
  - ▶ **lower()** – to obtain the lower case of a string
  - ▶ **replace()** – to replace a character by another one



# Summary

- ▶ **Use following functions -**
  - ▶ **upper ()** – to obtain the upper case of a string
  - ▶ **lower ()** – to obtain the lower case of a string
  - ▶ **replace ()** – to replace a character by another one
  - ▶ **.join ()** – to join a list of strings with an operator



# Self assessment questions

1. Given a string `s = ``this is a string```, how will you change it to ```this isn't a list```



# Self assessment questions

1. Given a string `s = ``this is a string```, how will you change it to ```this isn't a list```
2. Given the string ```F.R.I.E.N.D.S``` in `s`, obtain the string ```friends```.



# Solutions of self assessment questions

```
1. s = s.replace("string", "list")  
   s = s.replace("is", "isn't")  
   s
```



# Solutions of self assessment questions

1. 

```
s = s.replace("string", "list")  
s = s.replace("is", "isn't")  
s
```
2. 

```
s[::2].lower()
```



# 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/>



# Acknowledgements

- ▶ **Spoken Tutorial Project is a part of the Talk to a Teacher project**
- ▶ **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/>

