

Parsing Data

Spoken Tutorial Project

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

Script:Aditya Palaparth

Narration: Kiran K

IIT Bombay

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Objectives

At the end of this tutorial, we will learn to-



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- ▶ **Split a string using a delimiter.**



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At the end of this tutorial, we will learn to-

- ▶ **Split a string using a delimiter.**
- ▶ **Remove the whitespace around the string.**
- ▶ **Convert the datatypes of variables from one type to other.**



System Specifications



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- ▶ **Ubuntu Linux 14.04**



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- ▶ **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>.



Data set

- ▶ File `sslc.txt` contains data as:
- ▶ `A;015163;JOSEPH RAJ`
`S;083;042;47;00;72;244;;;`



Data set

The following are the fields in any given line.

- ▶ **Region Code which is 'A'**
- ▶ **Roll Number 015163**
- ▶ **Name JOSEPH RAJ S**
- ▶ **Marks of 5 subjects: – English 083 – Hindi 042 – Maths 47 – Science 00 – Social 72**

Total marks 244



Exercise 1

Split the variable line using a space as argument

Is it same as splitting without an argument ?



Exercise 2

What happens if you do `int("1.25")`



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- ▶ Get rid of extra white spaces around using the `strip()` function.



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- ▶ Tokenize a string using various delimiters like semi-colons.
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- ▶ **Convert datatypes of numbers from one type to another.**



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- ▶ **Convert datatypes of numbers from one type to another.**
- ▶ **Parse input data and perform computations on it.**



Evaluation

1. How do you split the string
“Guido;Rossum;Python” to get
the words.



Evaluation

1. How do you split the string
“Guido;Rossum;Python” to get
the words.
2. How will you remove the extra
whitespace in this sentence
“ Hello World ”



3. What does `int("20.0")` produce.



3. What does `int("20.0")` produce.

- ▶ 20
- ▶ 20.0
- ▶ Error
- ▶ "20"



Solutions

1. `line.split(';')`



Solutions

1. `line.split(';')`
2. `" Hello World ".strip()`



Solutions

1. `line.split(';')`
2. `"Hello World".strip()`
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/>



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/>

