

Input and Output

Spoken Tutorial Project

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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Learning Objectives



Learning Objectives

- **Print some values**



Learning Objectives

- ▶ **Print some values**
- ▶ **Print using format specifiers**



Learning Objectives

- ▶ Print some values
- ▶ Print using format specifiers
- ▶ **Take input from user**



Learning Objectives

- ▶ Print some values
- ▶ Print using format specifiers
- ▶ Take input from user
- ▶ **Display a prompt to the user before taking the input**



System Specifications



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► Ubuntu Linux 16.04



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- ▶ **Ubuntu Linux 16.04**
- ▶ **Python 3.4.3**



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- ▶ **Python 3.4.3**
- ▶ **IPython 5.1.0**



Pre-requisites

To practise this tutorial, you should know how to



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- ▶ **run basic Python commands on the ipython console**



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- ▶ run basic Python commands on the ipython console

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



Format operator



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- ▶ **%d** - specifies the integer format
- ▶ **%s** - specifies the string format



Format operator

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For example:

- ▶ **%d** - specifies the integer format
- ▶ **%s** - specifies the string format
- ▶ **%f** - denotes the float format



Exercise 1

What happens when you execute the following?

```
print ('x is %d, y is %f'  
%(x, y))
```



Exercise 2

Enter the number **5.6** as input and store it in a variable **c**



Exercise 3

- ▶ Execute the below statement:
`d = input()`
- ▶ What happens when you do not enter anything and hit Enter?



Summary

- ▶ Use **print** statement
- ▶ Use the format specifiers **%d**, **%f**, **%s** in the print statement
- ▶ Take input from user by using **input()**
- ▶ Display a prompt to the user before taking the input



Evaluation

1. `a = input()` and user enters
2.5

What is the type of `a`?

- ▶ `str`
- ▶ `int`
- ▶ `float`
- ▶ `char`



Evaluation

2. If $a = 2$ and $b = 4.5$, what is the result of the following action?

```
print ('a is %d and b is  
%2.1f' % (b, a))
```

- ▶ a is 2 and b is 4.5
- ▶ a is 4 and b is 2
- ▶ a is 4 and b is 2.0
- ▶ a is 4.5 and b is 2



Solution 1

1. `a = input()` and user enters
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What is the type of `a`?

- ▶ `str`
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Solution 2

2. If $a = 2$ and $b = 4.5$, what is the result of the following action?

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- ▶ a is 2 and b is 4.5
- ▶ a is 4 and b is 2
- ▶ **a is 4 and b is 2.0**
- ▶ a is 4.5 and b is 2



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/>

