

# Input and Output

**Spoken Tutorial Project**

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

**National Mission on Education through ICT**

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

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**18 May 2018**



# Learning Objectives



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- ▶ **Print some values**



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- ▶ **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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- ▶ **Ubuntu Linux 16.04**
- ▶ **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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To practise this tutorial, you should know how to

- ▶ 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  
2.5

What is the type of `a`?

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



# Solution 2

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



# 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/>

