

#### Forsk\_Labs: ST101 Data Science (Summer Trainings) 2018



 ▼ Python and Software Engineering Best Practices (P-1)

Introduction To Python

Hands On 01

- Python and Software Engineering Best Practices (P-2)
- Python and Software Engineering Best Practices (P-3)
- Python and Software Engineering Best Practices (P-4)
- Python and Software Engineering Best Practices (P-5)

Python and Software Engineering Best Practices (P-1) > Hands On 01 > Hands On 01

**■** Bookmark

# Python Basic Hands On

Forsk Technologies



## Python Version

- What Python version is installed on your machine?
- Note: This Command will only work on cmd or Command Prompt
  - Command:- python –V

#### Mathematical Functions

- Python and Software Engineering Best Practices (P-6)
- Python and Software Engineering Best Practices (P-7)
- Python and Software Engineering Best Practices (P-8)
- Python and Software Engineering Best Practices (P-9)
- Python and Software
   Engineering
   Best Practices
   (P-10)
- DS specific libraries (P-1)
- DS specific libraries (P-2)
- DS specific libraries (P-3)

```
import math
print math.log(16, 2)
print math.cos(0)
# Try printing Math.sqrt(16)
```

```
Output:
4.0
1.0
```

#### Types

What you get when you run below commands

```
type(7)
type 7
type(1.25)
type('hello')
len('abcd')
str(23)
int('125')
```

#### Division and Remainders

What you get when you run below commands

- Data Preprocessing (P-1)
- DataPreprocessing(P-2)
- DataPreprocessing(P-3)
- Supervised
   Machine
   Learning Regression (P 1)
- Supervised
   Machine
   Learning Regression (P

```
14/4
14//4
14%4
23//5
23%5
20%5
6//8
```

## String Delimiters

• What you get when you run below commands

```
"hello"
'Hi!'

# Figure out how to give Python the string containing the text
# I'm happy
```

## String Concatenation

• Try this

```
'very' + 'hot'
3 * 'very'
```

#### Autocompletion

- This is used to autocomplete any predefined variable name, it helps to reduce typing time for long variable names.
- Alt + / (for IDLE)
- tab (for Spyder)
- You can press Alt+/ several times if more than one identifier starts with the initial sequence of characters you typed

#### Print

```
x = 3
y = 5
print 'The sum
of',x,'plus',y,'is',x+y
```

#### **Escape Codes**

Escape code	Meaning
\',	,
\n	newline
11	1

print 'a\nb\n\nc'

## User Input in Python

```
# raw_input() is used to take string input
from user
name = raw_input("Enter your Name: ")

# input() is used to take numerical, tuple
or dictionary inputs
age = input("Enter your Age: ")
```