

Python Basics

(Input and String Functions (len,str,int,float))

Chapter 01c

Lesson Objectives

- STRING Functions
- INPUT Function

len () FUNCTION – length of a string

Returns the **LENGTH** of a string as a INTEGER.

```
>>>len('spam')  
4
```

str() Function – convert int or float to str

Use **str()** to convert numeric argument to string version of the number.

```
>>>str(0)
```

```
'0'
```

```
>>>str(3.14)
```

```
'3.14'
```

int() Function

Converts a string to int.

```
>>>int('42')
```

```
42
```

```
>>>int('-99')
```

```
-99
```

```
>>>int('1.99')
```

```
ERROR
```

int() Function

Converts float to int.

Rounds floating number down.

```
>>>int(1.25)
```

```
1
```

```
>>>int(1.99)
```

```
1
```

float() Function

Converts string or integer to float.

```
>>>float('3.14')
```

```
3.14
```

```
>>>float(10)
```

```
10.0
```

input () FUNCTION

- Waits for the user to type some text on the keyboard.

VARIABLE = input_value

- **INPUT** function always returns a **STRING**.

SYNTAX:

variable = **input**()

#Will prompt the user for a name

print('What is your name')

myName = **input()**

print(myName)

SYNTAX:

variable = `input`('string prompt ')

#Same as previous slide, but the prompt is in the `input()` NOT the `print()`

```
myName = input('Enter your Full Name ')  
print(myName)
```

input () FUNCTION

```
firstNum = input('Enter 1st number ')  
secondNum = input('Enter 2nd number ')  
print(firstNum)  
print(secondNum)  
print(firstNum + secondNum)
```

What is your OUTPUT?

input () FUNCTION – Convert str to int or float

- **REMINDER:** Numbers entered at input() is a STRING.
- **CONVERT** string number to numeric using **int** or **float** in order to calculate.

input() FUNCTION – Convert str to int or float

```
firstNum = int(input('Enter 1st number '))  
secondNum = int(input('Enter 2nd number '))  
print(firstNum + secondNum)
```