

Python102

Python for Data Science Bootcamp

(3.2) Python Basics Part 2

AIAT Academy

Python Basics' Outline (Part 2)

- Strings
- Console I/O
- Functions



Strings

Strings

```
greeting = 'Hi'
```

```
th_greeting = 'สวัสดี' # unicode by default
```

There is no Char in Python
' and " can be used in Strings

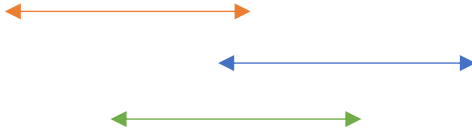
Strings (Indexing)

0 1 2 3 4
txt = 'AIAT'

```
txt[0] == 'A'  
txt[1] == 'I'  
txt[2] == 'A'  
txt[3] == 'T'  
txt[4] # Error!
```

Strings (Slicing)

0 1 2 3 4
txt = 'AIAT'



```
txt[0:2] == 'AI'  
txt[2:4] == 'AT'  
txt[1:3] == 'IA'  
txt[:2]  == 'AI'  
txt[2:]  == 'AT'
```

Converting Values

<code>str(2018)</code>	<code># >> "2018"</code>	<code>(Strings)</code>
<code>int("2018")</code>	<code># >> 2018</code>	<code>(int)</code>

Converting Values

`str(2018)` `# >> "2018"` (Strings)

`int("2018")` `# >> 2018` (int)

`float("2018.10")` `# >> 2018.10` (float)

`float("2018")` `# >> 2018.0` (float)

Console I/O

Console I/O

```
# Read an input (string) from the user  
name = input("What is your name? ")
```

Console I/O

```
# Read an input (string) from the user  
>> name = input("What is your name? ")
```

Output:

```
What is your name? Boat
```

Console I/O

Read an input (string) from the user

```
>> name = input("What is your name? ")
```

What is your name? Boat

```
>> print("Nice to meet you,", name)
```

Nice to meet you, Boat

Functions

Functions

*def is a keyword for
defining a function*

*Parameter is optional
and no explicit type*

```
def function_name(param1, param2):  
    value = do_something()  
    return value
```

*return is optional
returning a value, otherwise return None*

Functions (KM/h to MPH Converter)

```
def kmh_to_mph(kmh):
    mph = 0.6214 * kmh
    return mph
```

```
# Main
```

```
kmh = input("Enter a speed (KM/h): ")
mph = kmh_to_mph(kmh)
print("Speed:", kmh, "KM/H = ", mph, "MPH")
```