
FUNDAMENTALS OF PROGRAMMING

Week 2
Strings



DATA TYPES: STRINGS

- » A *string* is a sequence of characters: letters / symbols / special characters
- » String can be created by enclosing characters inside a pair of quotation marks (single or double)
- » `string_one = "This is a string"`
- » `string_two = 'This is a string'`
- » Today, we will look more at the properties of strings

LENGTH OF A STRING

»» The length of a string can be obtained by using `len()`

```
len("programming")  
11
```

»» There are 11 characters in the string "programming"

ESCAPE SEQUENCES

- » Escape sequences start with `"\"`
- » Escape sequences are translated to some special meaning when they appear in a string

Escape character	How it formats
<code>\\</code>	Backslash
<code>\'</code>	Single quote
<code>\"</code>	Double quote
<code>\n</code>	Line break
<code>\t</code>	Tab (horizontal indentation)

- » File: Example1.py

MULTILINE STRING

- » Usually, one string occupies one line
- » Multiline strings can be done by using three quotation symbols (single or double)

```
text = """  
=====   
| |  
| Introduction to Programming |  
| for international programs |  
| |  
=====   
"""
```

- » File: Example2.py

STRING CONCATENATION

- » In Python, you can add two strings together by using sum +

```
text1 = "first"  
text2 = "second"  
text1 + text2  
'firstsecond'
```

- » You can also multiply strings

```
4 * 'Awesome '  
'AwesomeAwesomeAwesomeAwesome '
```