

More About Strings

Programming and Algorithms

Lecture by
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```
n = 3  
for i in range(1,n+1):  
    print("Hello World!")
```

Hello World!
Hello World!
Hello World!

What will we Cover?

- Incorrectly formatted strings
- Multiline strings
- Apostrophes and quotation marks in a string

Common Errors in Python I

Multi-line strings error

```
location = "WHITEHALL  
SW1  
CITY OF WESTMINSTER"  
print(location)
```

Error location

File "C:\Users\danos\AppData\Local\Temp\ipykernel_1372\1370354036.py", line 1

```
location = "WHITEHALL
```

Likely cause of
the error

SyntaxError: EOL while scanning string literal

Error type

Error description

Common Errors in Python II

Multi-line strings solution

```
location = """WHITEHALL  
SW1  
CITY OF WESTMINSTER"""  
print(location)
```

```
WHITEHALL  
SW1  
CITY OF WESTMINSTER
```

Double quotation
marks

```
location = '''WHITEHALL  
SW1  
CITY OF WESTMINSTER'''  
print(location)
```

```
WHITEHALL  
SW1  
CITY OF WESTMINSTER
```

Single quotation
marks

Common Errors in Python III

Alternative solution:

use "`\n`", the newline character

```
location = 'WHITEHALL\nSW1\nCITY OF WESTMINSTER'  
print(location)
```

```
WHITEHALL  
SW1  
CITY OF WESTMINSTER
```

Common Errors in Python IV

Note: If you separate "`\n`" by spaces, they will be displayed like any other character at the start of a new line

```
location = 'WHITEHALL \n SW1 \n CITY OF WESTMINSTER'  
print(location)
```

```
WHITEHALL  
 SW1  
CITY OF WESTMINSTER
```



Space at the start of a new line

Common Errors in Python V

String with quotation marks

```
text = "He said: "Hello!""  
print(text)
```


Error location



```
File "C:\Users\danos\AppData\Local\Temp\ipykernel_9836\1351000231.py", line 1  
text = "He said: "Hello!""
```

SyntaxError: invalid syntax

Likely cause of
the error



Error type



Error description



Common Errors in Python VI

String with quotation marks solution

```
text = "He said: 'Hello!'"
print(text)
```

He said: 'Hello!'

Single quotation
marks

```
text = 'He said: "Hello!"'
print(text)
```

He said: "Hello!"

Double quotation
marks

Common Errors in Python VII

String with apostrophes

```
text = 'it did, didn't it?'  
print(text)
```

Error location

```
File "C:\Users\danos\AppData\Local\Temp\ipykernel_9836\1902290432.py", line 1  
    text = 'it did, didn't it?'
```

```
SyntaxError: invalid syntax
```

Likely cause of
the error

Error type

Error description

Common Errors in Python VIII

String with apostrophes solution

```
text = "it did, didn't it?"  
print(text)
```

```
it did, didn't it?
```

Double quotation
marks

Alternative solution

```
text = 'it did, didn\'t it?'  
print(text)
```

```
it did, didn't it?
```

Escape character

Common Errors in Python VIII

String with apostrophes solution

```
text = "it did, didn't it?"  
print(text)
```

```
it did, didn't it?
```

Double quotation
marks

Alternative solution

```
text = 'it did, didn\'t it?'  
print(text)
```

```
it did, didn't it?
```

Escape character

Try It Yourself I

Enter and run the following statements in the python environment:

Incorrectly formatted:

```
word = 'good  
print(word)
```

```
word = 'good"  
print(word)
```

Correctly formatted:

```
word = 'good'  
print(word)
```

```
word = "good"  
print(word)
```

Try It Yourself II

Enter and run the following statements in the python environment:

Incorrectly formatted:

```
surname = 'O'Brian'  
print(surname)
```

```
text = "He said: "Hi!""  
print(text)
```

Correctly formatted:

```
surname = "O'Brian"  
print(surname)
```

```
text = 'He said: "Hi!'"  
print(text)
```