

COMMENTS AND DOCUMENTATION

Computing

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Section 4.1: Single line, inline and multiline comments
Comments are used to explain code when the basic code itself isn't clear. Python ignores comments, and so will not execute code in there, or raise syntax errors for plain English sentences. Single-line comments begin with the hash character (#) and are terminated by the end of line. Single line comment: # This is a single line comment in Python
Inline comment: print("Hello World") # This line prints "Hello World"
Comments spanning multiple lines have """ or ''' on either end. This is the same as a multiline string, but they can be used as comments: """This type of comment spans multiple lines. These are mostly used for documentation of functions, classes and modules."""
Section 4.2: Programmatically accessing docstrings
Docstrings are - unlike regular comments - stored as an attribute of the function they document, meaning that you can access them programmatically. An example function: def func(): """This is a function that does nothing at all"""
return
The docstring can be accessed using the __doc__ attribute: print(func.__doc__)
This is a function that does nothing at all
help(func)
Help on function func in module __main__: func()
This is a function that does nothing at all
Another example function
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function.__doc__ is just the actual docstring as a string, while the help function provides general information about a function, including the docstring. Here's a more helpful example: def greet(name, greeting="Hello"): """Print a greeting to the user `name` Optional parameter `greeting` can change what they're greeted with."""
print("{} {}".format(greeting, name))
help(greet)
Help on function greet in module __main__: greet(name, greeting='Hello')
Print a greeting to the user name
Optional parameter greeting can change what they're greeted with.
Advantages of docstrings over regular comments
Just putting no docstring or a regular comment in a function makes it a lot less helpful.
def greet(name, greeting="Hello"): # Print a greeting to the user `name`
Optional parameter `greeting` can change what they're greeted with.
print("{} {}".format(greeting, name))
print(greet.__doc__)
None
help(greet)
Help on function greet in module main: greet(name, greeting='Hello')
Section 4.3: Write documentation using docstrings
A docstring is a multi-line comment used to

document modules, classes, functions and methods. It has to be the first statement of the component it describes.

```
def hello(name):  
    """Greet someone.  
    Print a greeting ("Hello") for the person with the given name.  
    """  
    print("Hello "+name)  
class Greeter:  
    """An object used to greet people.
```