

Python Practice

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Review Special Characters

Exercise 1. Link special characters with their definition. (Answers on the last page)

Special Characters	Definition
<code>\</code>	A new line or line breaker
<code>\t</code>	A carriage return
<code>\n</code>	A separator using a tabulation
<code>\r</code>	A way to use quotes in the string
<code>#</code>	An escape Character
<code>\r\n</code>	Comment - python will ignore everything after
<code>"""</code>	A carriage return followed by the end-of-line (Window system)
<code>' ' or '''</code>	A list, a sequence of strings
<code>[]</code>	A string, a sequence of characters

File Handling Review

Exercise 2. Complete blanks (See Answers section)

To open a text file: `file = open("hello.txt", "_____")`

To read a text file: `file._____()`

To read one line at a time: `file._____()`

To read a list of lines: `file._____()`

To write to a file: `file = open("hello.txt", "_____") file._____("Hello World")`

To close a file: `file._____()`

Module and Packages

Installing packages - <https://packaging.python.org/tutorials/installing-packages/>

Importing modules from packages - https://www.learnpython.org/en/Modules_and_Packages

Web Scraping Workflow

Source - DataCamp - <https://campus.datacamp.com/courses/importing-data-in-python-part-2/>

Workflow for GET requests using urllib:

- Import the necessary functions `# from urllib.request import urlopen, Request`
- Specify the URL `# url = 'https://www.wikipedia.org/'`
- Package the GET request `# request = Request(url)`

- Send the request and catch the response `# response = urlopen(request)`
- Return the HTML as a string `# html = response.read()`
- Close the response `# response.close()`

Workflow for GET requests using the package requests (one of the most downloaded Python packages):

- Import the package requests `# import requests`
- Specify the URL `# url = 'https://www.wikipedia.org/'`
- Package + send the request, catch response `# response = requests.get(url)`
- Return the HTML as a string `# html = response.text`

Workflow for BeautifulSoup (parse and extract structured data from HTML):

- `from bs4 import BeautifulSoup`
- `import requests`
- `url = 'https://www.crummy.com/software/BeautifulSoup/'`
- `r = requests.get(url)`
- `html_doc = r.text`
- `soup = BeautifulSoup(html_doc)`

Answers

Exercise 1. Link special characters with their definition

Special Characters	Definition
<code>\</code>	An escape Character
<code>\t</code>	A separator using a tabulation
<code>\n</code>	A new line or line breaker
<code>\r</code>	A carriage return
<code>#</code>	Comment - python will ignore everything after
<code>\r\n</code>	A carriage return followed by the end-of-line (Window system)
<code>"""</code>	A way to use quotes in the string
<code>' ' or ""</code>	A string, a sequence of characters
<code>[]</code>	A list, a sequence of strings

Exercise 2. To open a text file: `file = open("hello.txt", "r")`

To read a text file: `file.read()`

To read one line at a time: `file.readline()`

To read a list of lines: `file.readlines()`

To write to a file: `file = open("hello.txt", "w") file.write("Hello World")`

To close a file: `file.close()`