

Week 6

Wednesday 10/22/2025

Files

A. Working with data files

Method name	Use	Explanation
open	<code>open(filename, 'r')</code>	Open a file → use for reading → return a reference
open	<code>open(filename, 'w')</code>	Open a file → use for writing → return a reference
close	<code>filevariable.close()</code>	file use is complete

B. Finding a file

- Absolute file path : works on specific computer ; full location
- Relative file path : location based on current working directory

C. Reading a file

e.g. `fileref = open("ccdata.txt", "r")`
`fileref.close()`

D. Iterating over lines in a file

e.g. for line in myFile:

Statement 1

Statement 2

...

- New line = `\n`
- We can use `.split()` to break each line into a list
- *Note: in input function, the newline (`'\n'`) is not included in the line returned by input.

E. Alternative file reading methods

1. For loop

2. Readline method

- return a list of string
- readline: marker to the 1st character of new line
 - readlines: marker to the end of the file.
- `file.write(aString)`: add string to the end of the file
- `file.read()`: return a string of n characters
 - entire file as a single string if n is not provided
- `file.readline()`: return next line (with newline character)
 - n characters (if n parameter)
- `file.readlines()`: return a list of strings on single line

} n characters of new line (n para)

e.g. `line = file.readline()`

`while line:`

`Statement 1`

`Statement 2`

...

F. Writing text files

- `file.write(string)` : add ; can include `('\\n')`
- `file.writelines(list of strings)`

G. With statement

e.g. `with open('my data.txt') as md:`

`print(md)`

`for line in md:`

`print(line)`

`print(md)`

H. Fetching something from the web

- `retrieve_page(url)`