Reading Text from a File

09 December 2024

16:07

To read a file in Python, we first have to store the file path in a variable (in the below it is in the same directory as the .py so only the file name is used)

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We then have to specify to read the file (.read() doesn’t take any arguments)

File Cursor

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16:18

When we apply the .read method - the cursor starts from the beginning and finishes at the end.

This means that if we try to print again after the first execution, it will not return the contents again:

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A screen shot of a computer

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To work around this - we can store the read function in a variable (content) so the function is only used 1 time

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 Closing a File

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16:22

Once finished with using a file - it is best practice to close the file as it will be using RAM

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Opening Files using "with"

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16:24

We can open, action and close a file using the "with" function:

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\*note the with will close the file automatically - the above myfile.close is not needed

This helps as any actions done on the file are stored in an indent, therefore easier to read

Different File Paths

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If the file is stored in a different folder to .py - we will need to specify the path

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Writing Text to a File

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16:41

To write to a file, we can use .write and also add the argument "w"

A computer code with text

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And to add a next line, we can do \n after each input we are writing in

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Appending Text to an Existing File

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17:02

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We can append using "a" and to make it readable we can add "+"

However since we are appending before reading, we add .seek(0) to put the cursor back at line 0

------------ Character Meaning ------------

|  |  |
| --- | --- |
| 'r' | Open for reading (Default) |
| 'w' | Open for writing, truncating the file first |
| 'x' | Create a new file and open it for writing |
| 'a' | Open for writing, appending to the end of the file if it exists |
| 'b' | Binary mode |
| 't' | Text mode (Default) |
| '+' | Open a disk file for updating (reading and writing) |
| 'U' | Universal newline mode (deprecated) |