**Week 9 File Input Output Questions**

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Q: There are different file open modes: What are they?

* Good question Timmy.
* There are multiple “open modes” for a file! When we go to open a file, we can choose a flag to open a file with, these are:
  + ios::in: Opens for input operations.
  + ios::out: Opens for output operations.
  + ios::binary: Open in binary mode.
  + ios::ate: Set the initial position at the end of the file.
  + ios::app: All output operations are performed at the end of the file, appending the content to the current content of the file.
  + ios::trunc: If the file is opened for output operations and it already existed, its previous content is deleted and replaced by a new one.
* Bonus! There are also three streaming methods to open a file, these are:
  + ofstream: Stream class to write on files.
  + Ifstream: Stream class to read from files.
  + fstream: Steam class to both read and write from/to files.

Q: What happens if you don’t close the file? Is it something we need to worry about.

* Yes, we need to close the file!
* The reason for this is so the stream object that was created to open the file can open another file, and that file is available again to be opened by other processes.

Q: How many bytes are in the file? Is this expected based on the size of the variable types?

* The size of the file is 9 bytes! This is correct as there are three variable types being “float”, “int” and “char”. If the file was empty, there would be 0 bytes!

Resources used:

* <https://cplusplus.com/doc/tutorial/files/>
* <https://www.tutorialspoint.com/cplusplus/cpp_data_types.htm>