Assignment 2.3

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While running all the attack cases I examined my reference monitor required specific checks such as:

- Threading Locks: This were required in cases when the attacker uses threading to write to same file simultaneously and there raises and error on race condition thus having a lock while the file operation is being processed and unlock when it's done to be available for the other action to be performed is the best way to handle it.
- EndofFile Write: When the action tried to write beyond the file's max length it should not allow that thus raising "SeekPastEndOfFileError" which is now handled.
- Negative offset: When the attacker tries to write at negative offset it should not allow as no character can be written on a negative offset of a file thus raising "RepyArgumentError".
- Write on File closed: This scenario come when the attacker closes a file and then tries to perform the write function this shouldn't happened thus checking and maintaining file_closed status helps to cater this issue.
- After locks implemented, we have to make sure that whenever there is a exception the lock release is called which is done by using the finally case that in any case releases the lock.