

Systems Programming Report 2

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I have implemented Tier three of the Solution.
This code compiles correctly with no bugs or errors that I am aware of.
Note that you must compile using the syntax
”g++ -std=c++17 -pthread strace-analyser.cpp -o strace-analyser”
to correctly compile using threads on the school linux servers.

The timings for the Sequential version:

```
real    0m0.072s
user    0m0.068s
sys     0m0.003s
```

The timings for the Threaded version:

Runs/Threads	1	2	4	8
1	0.231s	0.319s	0.432s	0.525s
2	0.213	0.330s	0.482s	0.496s
3	0.220	0.319s	0.468s	0.516s
Median	0.221	0.323	0.461	0.512

Despite the threaded method theoretically being more efficient it has a significantly longer runtime than the sequential version. This is most likely due to the sample test file being so small. The threads don't have time to work properly and the time that it takes to open and close them makes it inefficient for small files.