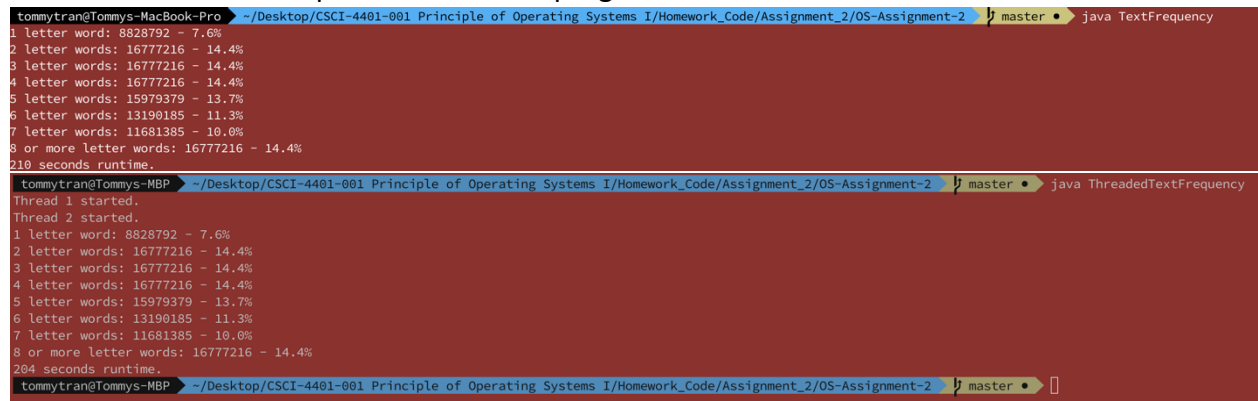


Tommy Tran
2420005
CSCI 4401 OS
Assignment 2

Question 1:

The file name: TextFrequency.java & ThreadedTextFrequency.java

Screenshot of the example out from both programs:



```
tommytran@Tommys-MacBook-Pro ~/Desktop/CSCI-4401-001 Principle of Operating Systems I/Homework_Code/Assignment_2/OS-Assignment-2 master • java TextFrequency
1 letter word: 8828792 - 7.6%
2 letter words: 16777216 - 14.4%
3 letter words: 16777216 - 14.4%
4 letter words: 16777216 - 14.4%
5 letter words: 15979379 - 13.7%
6 letter words: 13190185 - 11.3%
7 letter words: 11681385 - 10.0%
8 or more letter words: 16777216 - 14.4%
210 seconds runtime.

tommytran@Tommys-MBP ~/Desktop/CSCI-4401-001 Principle of Operating Systems I/Homework_Code/Assignment_2/OS-Assignment-2 master • java ThreadedTextFrequency
Thread 1 started.
Thread 2 started.
1 letter word: 8828792 - 7.6%
2 letter words: 16777216 - 14.4%
3 letter words: 16777216 - 14.4%
4 letter words: 16777216 - 14.4%
5 letter words: 15979379 - 13.7%
6 letter words: 13190185 - 11.3%
7 letter words: 11681385 - 10.0%
8 or more letter words: 16777216 - 14.4%
204 seconds runtime.
```

The top image is the TextFrequency.java program without threads, while the bottom image is the ThreadedTextFrequency.java with threads.

For this question, it appears that the threaded code improves the speed of the program run.

Question 3:

The file name: DiningPhil.py.