ASSIGNMENT 1

* Made a variable to save the total number of matches
* Made a variable to keep up with the length of each string
* Had to do some malloc for memory purposes since we don’t have string variables in C for the string for the text file
* I had to make my start position a unsigned integer pointer so that it may create my pthread since I casted a void pointer
* I learned that once we found the matches we needed to lock once we find the total matches
* Once we locked , this blocks the threads allow me to print the value and then unlocking after once im done
* I learned we have to exit once we are done with the thread we are calling , which is exiting the main thread

ASSIGNMENT 2

* Made pointers for the front and rear queue
* We needed condition variables for both producer and consumer(this allow for me to put a word in the queue and delete a word from the queue
* I learned about pthread\_cond\_init which initializes a variable allowed for us to access the address of the condition variable to initialize.
* Learned how to create and join threads
* Learned more sleep , sleep is allow has us to achieve synchronization between both producer and consumer

ASSIGNMENT 3

* Learned point of context switch is context switch refers to the switching of the CPU from process or thread to another
* Cost of context switch ranges from several microseconds to thousands
* We going to measureSwitch 1 and 2 for context switch using direct cost
* With direct cost , we can see the number of cycles for load and store instructions or values
* Using indirect cost will cause cache misses, which will slow down the execution of the process