Discussion for Mini Project 2

In this project we used Threads and Synchronization to solve the bounded buffer problem.

***Java:***

For the java implementation, we used the scanner method to input both the amount of slave threads as well as the maximum number of jobs which can be done.

In the main method we used two simple for loops to create the threads object as well as calling the generateRequests method.

We created our master and slave threads by implementing the built in Runnable interface which also had the generateRequests and Thread\_routine methods respectively . generateRequests took in the Queue object and created new requests, added them to the queue and started the thread. The length of each thread was randomly determined .

Our Queue class used an arraylist to store the request objects and has methods for pushing, dequeuing etc.

To implement the consumer part we used a while loop to run the thread\_routine method. Thread\_routine dequeues the first awaiting thread and puts the thread to sleep for its respective time period.

The program terminates after the queue is empty and there are no longer any jobs to finish.