PA3 Interview Preparation

* Requester

1. Read each line of the file
2. Place the name into a shared data area
3. Record the processing in a file
4. Each name file should be serviced by a single requester thread
5. Queue saves the name file that
6. Checking if there are any remaining name files to service.
7. If so, it requests one of the remaining names file

* Resolver

1. Take names from shared data area
2. Find the IP address for that host name
3. Write results to a file.
4. Taking a name off the array and querying its IP address.
5. After mapped to an IP address, write it to result.txt

* General

1. To avoid deadlock and busy wait, use mutex and condition variables.