

## Assignment 1

(a) Implement a framework for multithreaded client-server, where server will create pool of worker threads (say 5) to provide services to pool of clients (say 5). Server should be behaving as a concurrent server. Now send request (say send a request string hello) from clients. Server should respond with string Hi, responding with Thread1, Thread2 and so forth, which is the response from server thread1, thread2, etc that you have created already.

(b) Implement a multithreaded server that can be used as a proxy server to access some designated file (say it reflects the proxy copy of two file1.txt, file2.txt). Now use a client to send as request to the server and try to access the files from proxy copy.

### Reference:

1. Learn basic socket programming to implement Client-server programming. Book: Unix n/w programming, Vol-1, by R. Stevens
2. Pthread Primer (Book)  
[http://192.168.125.5/~sdeka/ds\\_ppt/pthread-primer.pdf](http://192.168.125.5/~sdeka/ds_ppt/pthread-primer.pdf)
3. POSIX Threads Programming by Blaise Barney, Lawrence Livermore National Laboratory  
<https://computing.llnl.gov/tutorials/pthreads/>
4. POSIX thread (pthread) libraries: YoLinux Tutorial  
<http://www.yolinux.com/TUTORIALS/LinuxTutorialPosixThreads.html#BASICS>
5. Pthreads Primer by B Lewis  
<http://www8.cs.umu.se/kurser/TDBC64/VT03/pthreads/pthread-primer.pdf>