

National University of Computer and Emerging Sciences



**Laboratory Manuals**  
*for*  
**Computer Networks - Lab**  
  
(CL -3001)

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**Objective:** TCP Multi-threading using threads.

### **In lab Statement: (20) ONLINE VOTING SYSTEM**

You are to devise an online vote casting system using **TCP** multithreaded server-client program. The voters will log on from client systems and cast their votes. Note that

**One client can cast a vote ONCE AND ONLY ONCE.**

A list of registered voters is available in a text file in the following format:

**Name/CNIC number**

System should be secure and should only allow clients with authentic name and CNIC to cast the vote.

The Server shall

- First of all take the client's name and CNIC and match it with the content of the text file (Voters\_List.txt).
- If the details match, then it will welcome the voter and **display the names and poll symbols of the candidates on the terminal.**(Candidates\_List.txt) • The voter will then cast the vote by **MENTIONING THE POLL SYMBOL (not the name) OF THE CANDIDATE. All these details are to be recorded in an output text file.**
- This system should work perfectly for **at least 5 different clients.** Page 2 of 3

