## National University of Computer and Emerging Sciences



# **Laboratory Manuals**

for

# **Computer Networks - Lab**

(CL -3001)

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Section	BCS-5C
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#### Lab Manual 07

**Objective:** TCP Socket Programming with Multi-threading

### In lab Statement: (10)

#### **ONLINE VOTING SYSTEM**

You are to devise an online vote casting system using **TCP** multithreaded client-server 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.

### Note:

- 1. You should be familiar with basic file streaming commands in PYTHON.
- 2. The server-client code **should be in PYTHON** and only PYTHON language. No other language is accepted
- 3. Student shall be awarded zero in the lab and -50 absolutes, if plagiarism of any kind is found in this lab.