SSN COLLEGE OF ENGINEERING (Autonomous)

(Affiliated to Anna University, Chennai)

DEPARTMENT OF CSE

UCS 1511 NETWORK LABORATORY

**A7: Simulation of ARP**

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**Learning Outcome:**

To be proficient in developing an application to simulate the functionality of ARP protocol using socket programming in C

**Write the code using socket programming in C**

1. Establish the basic connection between client and the server.
2. Develop an application to simulate ARP protocol

**Multiple machines:**

1. Server broadcast the ip address to four client machine
2. All client machines of different machines will receive the ip address. Checks with its own ip address. Replies to the server only if its matches.
3. Use system calls to find ip and mac address of the machine.

**Single machine**

1. Simulate the same procedure on single machine.
2. One client machine uses system calls to get ip and mac address
3. Other 3 client machines should get ip and mac address as input from user.
4. Validate both ip and mac address