SSN COLLEGE OF ENGINEERING (Autonomous)

(Affiliated to Anna University, Chennai)

DEPARTMENT OF CSE

UCS 1511 NETWORK LABORATORY

**A11: Webpage download**

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Batch: 2020-2024 Year: III Sem: V Sec: B

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**Learning Outcome:**

To implement a HTTP web client program to download the using socket programming in C

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

1. Read the name of the server as command line argument

(Ex: [www.ssn.edu.in/wp-content/uploads/2021/02/NIRF-2021-SSNCE-ENGG.pdf](http://www.ssn.edu.in/wp-content/uploads/2021/02/NIRF-2021-SSNCE-ENGG.pdf))

2. Get the address of the server using gethostbyname() that returns the pointer to network data structure for given host

3. Create a TCP socket using socket()

4. Connect to remote server

5. Send request using a GET /path/filename HTTP/1.1\r\n request using either send() or write().

(GET /wp-content/uploads/2021/02/NIRF-2021-SSNCE-ENGG.pdf HTTP/1.1\r\nHost: www.ssn.edu.in \r\n\r\n)

6. Receive the response using either recv() or read().

7. Parse the response to find out if the request succeeded and what format the file data is being sent as.

8. Receive the file data, if present, using either recv() or read() and write the downloaded page into file under a different name in a local folder.

9. Close the socket and the file.

Sample Output:

>> gcc webpagedownload.c -o download

>>./download [www.ssn.edu.in/wp-content/uploads/2021/02/NIRF-2021-SSNCE-ENGG.pdf](http://www.ssn.edu.in/wp-content/uploads/2021/02/NIRF-2021-SSNCE-ENGG.pdf)

Enter the new file name: output.doc

Downloaded file saved under output-v2.doc