Department of Computer Science and Engineering, CBIT, Hyderabad-75

BE ¾ (CSE-1) COMPUTER NETWORKS LAB

PROGRAMMING ASSIGNMENT-1

Date: 22-01-2017

Develop a solution for confidential exchange of files between client and server. [Use encryption algorithms]

Suggestions

1. Write a client/server program using TCP in which the client sends the file name whose contents are to be retrieved and server checks whether the file exists or not. If exists then server opens the file, reads the contents and send to the client. Client process opens a new file, reads the contents from the server and writes to the file / displays on the terminal. **[5 marks]**

2. Client generates a key pair and then sends the public key to the server by keeping the companion private key with it. Upon receiving the client's public key, server encrypts the data and sends the encrypted data. Client decrypts the received data using its companion private key. **[5 marks]**

3. Ensure that the client and server processes should be terminated when the user types "***bye***" or "***exit***" message at the client side. **[2 marks]**

4. Include proper code optimization, comments, test cases **[3 marks]**

Instructions

- Define the problem clearly and Develop the algorithm/flow chart and then implement it.
- Test your code with sample data
- Take the snapshots of the results along with analysis and write your conclusions
- Submit your work in the form of report by uploading
- Also submit one copy from each team by filling the following format.

Format:

Computer Networks Lab Assignment-1					
Name of the Team Lead:			**Date of upload/submission:**		
Sno	**Hall Ticket no.**		**Marks (15)**	**Remarks**	**Signature**
1					
2					
3					
4					

Last Date: **10th February, 2017**