Lab Assignment #01
Submit on or before 16/01/18

Weekly contact	: 0 − 0 − 3 (L − T − P)
Course No.	: CS 612
Course Title	: Computer Networks
Instructor-In-Charge	: **Dr. SK Hafizul Islam (hafi786@gmail.com)**

Objectives

1) To learn how to use commands to move around the file system hierarchy and manipulate the files.

2) To learn how to use Linux networking commands.

3) To learn how to view logs in Linux.

Note: use man command to explore all the options of a command.

Q1) Execute the following process controlling commands and write the output in your laboratory note book

ps, pstree, top, kill, killall, service

Q2) Execute the following text viewing commands and write the output in your laboratory note book

head, tail, less, more, cat

Q3) Execute the following text viewing commands and write the output in your laboratory note book

head, tail, less, more, cat, grep

Q4) Execute the following text viewing commands and write the output in your laboratory note book

head, tail, less, more, cat

Q5) Read the man pages of *arp*, *dig*, *nslookup*, *netsta, tcpdump, ping, hostname, traceroute, tracepath, nmap, ifconfig, ifup, ifdown, route*. Write the solution of the following problems into the report and also paste the screenshots of Terminal into the report.

(a) Find the IP address of your machine using 'ifconfig' command.

(b) Use 'ping www.iiitk.ac.in' command and find out i) the average RTT(round trip time), ii) the %packet loss, iii) size of packet that is sent to www.iitk.ac.in server, iv) size of packet that is received by your machine.

(c) Use 'dig www.iiitk.ac.in' command and find out i) the ip address of iiitk.ac.in, ii) the ip addresses of local DNS servers of IIIT Kalyani.

(d) Use 'traceroute www.iiitk.ac.in' and find out i) number of hops in between your machine and iitk.ac.in server, ii) the ip address of your network gateway of your subnet.

(e) Use 'arp -an' command to find out the MAC address of the device that is performing as your network gateway.

Q6) Linux and the application that run on it generate messages which are recorded in log files.

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The default location for log files in linux is /var/log. Command to show
all log files in /var/log directory (ls -l /var/log)
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