**LINUX EXERCISE (LAB 06)**

Exercise 1. Basic operations for networking

1. Use command lines to show the networking information of your computer: IP Address, routing table, name server.
2. Assume that we don’t have DNS service. How could we access other computers without IP addresses?
3. Which name server does resolve the domain name redhat.com?
4. Send email to your local computer (send emails between accounts of your computer). Try to send/receive using two different methods/ How could you know whether sent emails have been received or not? (You need to install **mailutils** if not installed)

Exercise 2. Security

1. List all opened ports on your computer
2. Install all upgrades of your installed software
3. How could you know users connecting to your system?

Exercise 3. Other basic networking operations (Install necessary software if needed)

1. Use **telnet** to connect to google.com through port 80. Type the command “GET / HTTP/1.1” after you connect to google.com. What is the result of the command?
2. Use **ping** to find the round-trip time for messages connecting to [www.yahoo.com](http://www.yahoo.com)
3. Use **traceroute** to show all intermediate nodes to connect to [www.yahoo.com](http://www.yahoo.com). What happens?
4. Add the option “-I” to the traceroute command and show the result. What are towns/cities that your message is passed through?
5. Use **ftp** to connect to a FTP server. For example, you can try this free FTP test server
   * FTP URL: ftp.dlptest.com or <ftp://ftp.dlptest.com/>
   * FTP User: dlpuser@dlptest.com
   * Password: eUj8GeW55SvYaswqUyDSm5v6N

Try to upload a file to that FTP server. Download the uploaded file. Is the permission of your downloaded the same as the original one?

Some commands after logging in a FPT server

* + ls: list files
  + cd: change the working directory
  + lcd: set up the downloading directory
  + get file: download a file
  + put /path/file: upload a file to the FTP server
  + bye/ exit/ quit: terminate the connection

1. Use **wget** to download the page <https://soict.hust.edu.vn/gioi-thieu>. Show the content of the download file. Could you use the **sed** command to remove HTML tags and see the raw content?
2. Use **who** to get the list of users in your computer
3. Dùng lệnh **write** để gửi thông điệp cho tất cả người sử dụng. Làm sao để ngăn người khác gửi thông điệp cho bạn? Làm sao để khôi phục tính năng nhận thông điệp (tin nhắn)? (mesg n)