Lab-Sheet 6

1 Ping in NS2

For this week's lab-session 6, the goal is to become familiar with the concept of **Ping**, which is a basic Internet program that allows a user to verify that a particular IP address exists and can accept requests.

What is Ping?
Ping is used diagnostically to ensure that a host computer the user is trying to reach is actually operating. Ping works by sending an **Internet Control Message Protocol** (ICMP) **Echo Request** to a specified interface on the network and waiting for a reply. Ping can be used for troubleshooting to test connectivity and determine response time (**latency**) and **Throughput** as well.

How to get your IP address.
Google: just type >> what is my ip address   >>   e.g.   137.195.26.89
Linux: at the command line type >> hostname –I >>   e.g.   137.195.26.89
Windows: at the command line type >> ipconfig   >>   e.g.   137.195.26.89

How to ping in Linux and windows.
Open up your browser and go to https://www.wikihow.com/Ping-in-Linux try to understand the concept of ping, also try to send a ping echo request to your next colleague's computer using Linux or windows commands: **How to run a ping test**: Open up your browser and go to:
https://iihelp.iinet.net.au/How_to_run_a_ping_test

How to ping in Ns2.
Exercise 1: Download ping.tcl from vision (under lab 6), and try to understand what the code is doing/does, and understand what the simulator doing also.

Q1. What is round trip time (RTT), how to use RTT to measure the Throughput?