

Please read the questions carefully before you start your work.

Please ask the instructor any time if you don't understand the question or find any mistakes in the question.

In this assignment you will develop a program that will respond to **any** ping request (ICMP echo-request) using python:

- 1 The program will sniff the network listening for icmp echo requests.
- 2 The program will display the following information from each sniffed packet.
 - a. Source IP address
 - b. Destination IP address
 - c. ICMP sequence number
 - d. ICMP checksum
- 3 The program will build an ICMP echo-response to the request.
- 4 The program will display the following information about your response packet:
 - a. Source IP address
 - b. Destination IP address
 - c. ICMP sequence number
- 5 The program will send the response packets out the network interface.
- 6 Your program will terminate after 5 packets have been sent.

To obtain a perfect grade, the machine that initiates the ping should show the responses.

You are required to use scapy and Python 2.7. You can use *from scapy.all import ** to import scapy.

Grading Criterion:

- The grade will be zero if the file is not submitted correctly or on time
- The grade will be zero if the program fails to run
- Your program should solve the above requirements. At least ten points will be taken off for each requirement that is not met.
- Non-original work will be graded as a zero
- If multiple submissions are allowed, only the latest submission will be graded

Submission instructions:

- 1 Name your file *studentID_lab#.py*
- 2 Attach your file to the correct assignment under the Lessons category and submit
- 3 You are a CS major, that should be more directions than you needed