CS 457 - Fall 2014
Homework 6

Date due: Tuesday, October 28, 2014 by 2PM

Note: This homework is ESSENTIAL if you want to successfully complete project 3. If you cannot do this assignment by hand, you will not be able to do it programatically.

Problem 1 (25 points total):

Use iterative DIG commands to resolve the domain name www.cnn.com into A record(s) starting from the root server. Use the format:

    dig @x.y.z.w www.cnn.com

You will need to execute this command approximately 10 times in order to resolve the domain name. A CNAME chase is involved. You will get 2 points for each DIG, up to 10 digs. You will get 5 extra points for the final name resolution.

Just to get you started, the A root server is located at IP address 198.41.0.4, but you would want to verify that by doing a “dig .” and following the delegation.

Your first dig will be

    dig @198.41.0.4 www.cnn.com

The rest is up to you.

NOTE: ALL of your DIG’s must use the @x.y.z.w (IP address) format. Do not use a domain name here, even though a domain name would work (e.g. dig@ns1.cnn.com). It will be easier for project 3 if you just use IP addresses, otherwise you have to go even deeper into recursion.

Perform this task in a terminal window, then copy and paste the entire series of digs into a text editor and submit this as a PDF to RAMCT.