CIS232 – DNS

This assignment requires that you successfully configure your Linux server as a DNS server for your local network.   You need your two machines for this assignment; your Linux Server and the Linux client.

Before beginning:
You need to undo anything related to name to ip resolution (/etc/hosts) from the client. In part 1 below I'm asking for screenshots of things that confirm to me that all existing name to IP configuration at the client has been cleared before configuring DNS. In addition, remove any references to the client from the server's hosts file. Clear all before answering the questions for part 1 AND generate all screenshots for Part 1 <u>before</u> configuring starting Part 2.

> **Part 1**
> 1. At the linux client, display the contents of the /etc/resolv.conf file.
> 2. At the linux client, display the contents of the /etc/hosts file.
> 3. At the server, display the contents of the /etc/hosts file.
> 4. Ping the server by name from the client (it shouldn't work)
> 5. Ping the client by name from the server (it shouldn't work)
>
> **Part 2**
> Configure your Linux Server as a DNS server.
> - The zone name must be cis232.bcc.
> - You must configure a reverse lookup zone
> - You must configure Dynamic DNS.
> - Both zones must be configured to allow dynamic updates
> - The server must be the primary / preferred DNS server for all clients on the network. There should be <u>no</u> secondary/alternate DNS server.
> - Create an alias (CNAME) record for the server. The alias name must be server.

Once everything is properly configured and you've tested it to make sure it all works, complete the remaining questions.

At the Server:
> 6. Display the contents of the /etc/resolv.conf file.
> 7. Display the contents of the dhcpd.conf file.
> 8. Display the contents of the /etc/named.conf.include file
> 9. Display the contents of the /etc/hosts file
> 10. Display the contents of the forward lookup zone file. Include the file name and its contents in your answer.
> 11. Use the host command to list all the records in the forward lookup zone. Include the command and its output as your answer.
> 12. Display the contents of the reverse lookup zone file. Include the file name and its contents in your answer.
> 13. Use the host command to list the all the records in the reverse lookup zone. Include the command and its output as your answer.
> 14. Provide a directory list (ls –l) of the /var/lib/named/dyn directory.
> 15. Provide a directory list (ls –l) of the /etc/named.d
> 16. Ping the client by name (three times). Include the command and its output as your answer.
> 17. Ping the college's website two times. Include the command and its output as your answer.
> 18. Use nslookup to learn the name that goes with the client's IP address. Include the command and its output as your answer.

At the Client

19. Display the contents of the /etc/resolv.conf file.
20. Display the contents of the /etc/hosts file
21. Show me the contents of the /etc/sysconfig/network/ifcfg-eth0 file.
22. Use the wicked command to display the adapter information for your adapter.
23. Display the contents of the /var/lib/wicked/lease-name-dhcp-ipv4.xml file.
24. Use the host command to learn the server's IP address. Include the command and its output as your answer.
25. Ping the server by its alias name 3 times. Include the command and its output as your answer.
26. Use nslookup to learn the name that goes with the server's IP address. Include the command and its output as your answer.