CS 231 Homework: NAT

This assignment requires that you successfully configure your virtual server as a NAT overload server. Requirements:

- You must have successfully completed the DHCP assignment before starting this assignment.
- You'll need one static IP address for the second network card in your server. Use the IP Address assigned to you from this list: IP Address Assignments.
- Name each of the cards within your virtual server with a descriptive name; use *Internal* for the card that's connected to the internal network and use *External* for the card that's connected to the external network.
- Revise DHCP settings as necessary to ensure that all necessary TCP/IP settings needed at all client machines are received from the DHCP server.

After ***successfully*** configuring and testing NAT, submit the following screenshots. Be sure to label each screenshot with the respective problem number. The screenshots described here are assuming the use of the web client.

1. The VM Hardware block on the Summary tab of your Virtual Server. Make sure the screenshot presented identifies which machine's hardware block you are showing me. I need to see the network adapter(s) and the network that it's on within VM settings.
2. Do the same as you did in #1, but for the Windows 10 machine.
3. TCP/IP Properties screen of the Internal Card on the virtual server.
4. TCP/IP Properties screen of the External Card on the virtual server
5. IPCONFIG /ALL's output on the Windows 10 Virutal machine
6. TCP/IP Properties screen of the network card on the Windows 10 virtual machine
7. DHCP Server binding setting
8. While in the DHCP MMC show me the list of addresses that have been leased. Be sure all columns displayed on the right are wide enough to read their contents.
9. While in the DHCP MMC show me the configured scope options.
10. Open the Routing & Remote Access tool and, within the NAT section, display the properties (NAT tab) of each card. Be sure the screenshot includes the titlebar.
11. At the Server, using a browser, connect to the class website. Provide a screenshot of the browser window that confirms you've successfully connected to the website by its name. Your screenshot must confirm to me that you are at your virtual server.
12. At Windows 10, using a browser, connect to the class website. Provide a screenshot of the browser window that confirms you've successfully connected to the website by its name. Your screenshot must confirm to me that you are in fact at your windows 10 client.
13. At the Windows 10 machine, confirm that you still can successfully run Active Directory Users & Computers. Provide a screenshot of the ADUC window. Your screenshot must confirm to me that you are in fact at your Windows 10 machine.