Gurjot Singh Khakh

Professor Torres

8/22/2025

IT 0100

Lab: 1

- Copy parts A, B, and C from Canvas

  - Research jobs that require the CompTIA A+ Certification
    - What additional qualifications are needed for the jobs?
    - What is the salary range for the jobs?
    - What features made the jobs stand out?

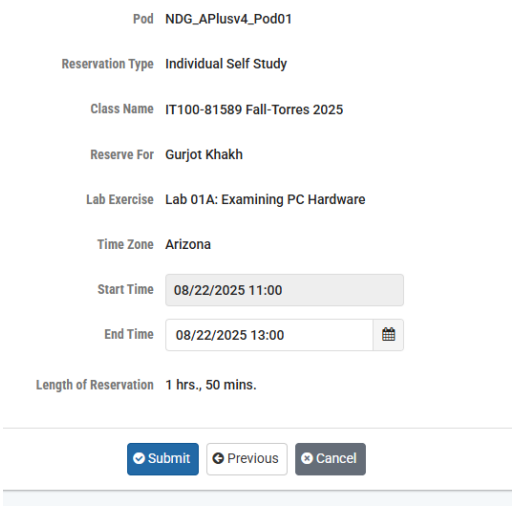
  - **Part A:**
    - Some jobs that require the CompTia A+ certification are
      - **Helpdesk technician/IT Support specialist**
        - Indeed reports $18.79-$40.40/hr in California
        - Salary.com reports $44.8k to around $66.6k Annually in California
        - The features of this job that caught my attention was that I did my research and this is considered to be the most common entry level job for anyone who is pursuing a career in IT
      - **Desktop Support Technician**
        - Indeed shows $19.13-$35.99/hr in California
        - Salary.com reports $60,603-75,327 Annually in California
        - The feature that stood out of this job was that this role can asisit with deploying new systems
      - **Technical Support specialist/ Analyst**
        - Indeed shows
        - Salary.com shows
        - The feature that stood out to me was that this is more of a broader role than helpdesk and can be remote or on site
      - **Field Service Technician**
        - Indeed reports $19.34-$42.66/hr in California
        - Salary.com reports $69,971-88,079 Annually in California for more experienced roles

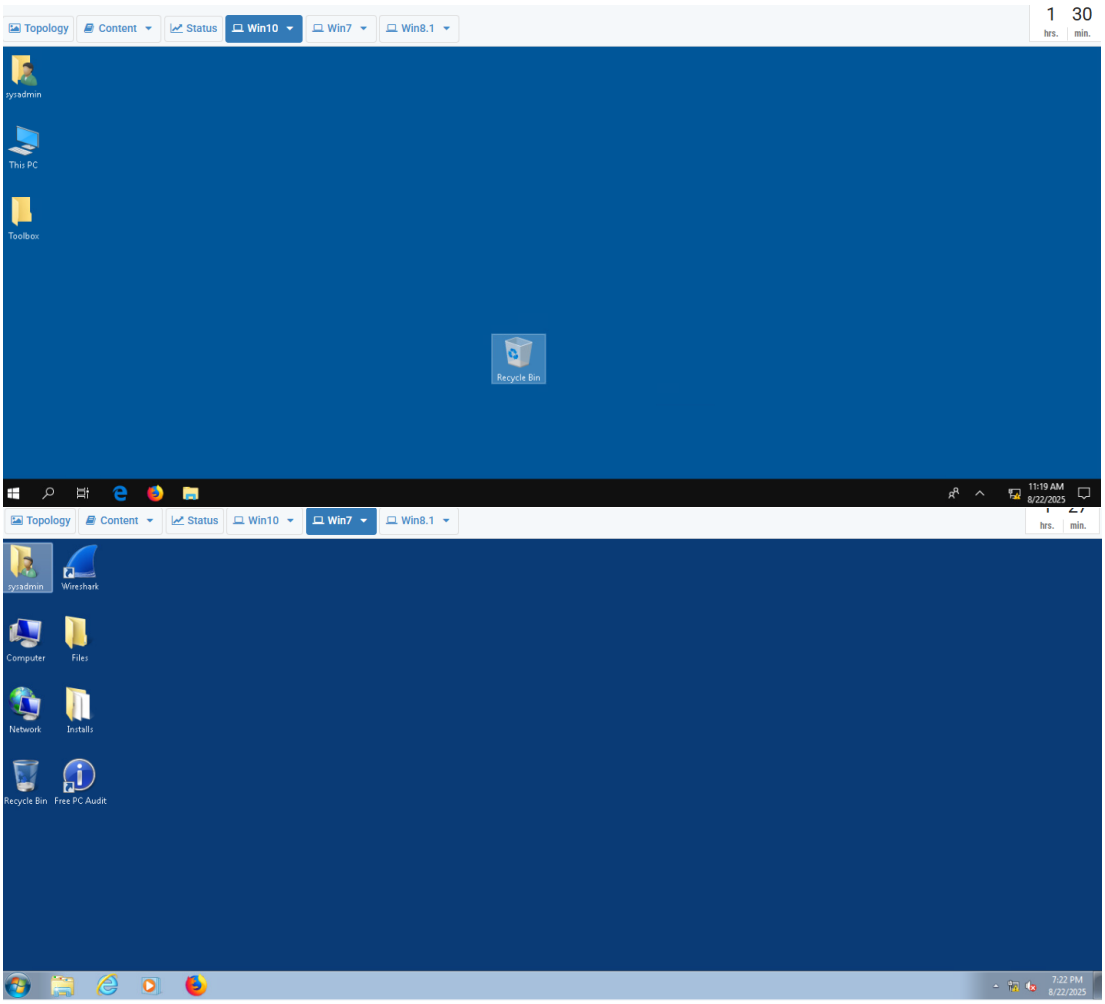
        - The feature that stood out to me was that in this role you travel to customer locations and also you work independently and need very good time management skill
    - **IT Technician/ Computer Technician**
        - **Indeed shows a range of $19.10-33.84/hr in Sacramento, California**
        - **Salary.com shows a range of $37,000-68,589 Annually in California**
        - **The feature that stood out to me was that in this role you must cover a lot of aspects from software installation to repairs etc. so this role requires a lot of knowledge**
    - **System Support specialist**
        - **Indeed shows a range from $14.99-36.15 in the United States**
        - **Salary.com shows a range from $43,000-$99,500 in the United States**
        - **The feature that stood out to me for this job was that you collaborate with system admins and engineers to update, patches and user access issues**
    - **Network Support Technician**
        - **Indeed reports a salary range from $18.30-$41.30 in the United States**
        - **Salary.com reports a salary range of $63,953-73,456 in the United States**
        - **The feature that stood out to me was that this role IP settings**
    - **Data Center Technician**
        - Indeed shows $20.25-47.03/hr in California
        - Salary.com shows $70,528-$88,876 Annually in California
        - The feature that stood out to me was that this is a physical job and not a desk job and working with servers, storage, power and cooling systems
- **Additional Requirements for these Jobs**
    - IT Helpdesk Technician:
        - 6 months to 1 year of customers service or technical support
        - Communcation, problem solving
        - Windows OS, Microsoft Office, Basic Networking
    - Desktop Support Technician
        - Hands on skills imaging computers, Active Directory basics, printer and monitor support
        - Familiar with tools such as TeamViewer, SCCM, RDP)
    - Technical Support Specialist/Analyst
        - Customer service experince, thinking out of the box

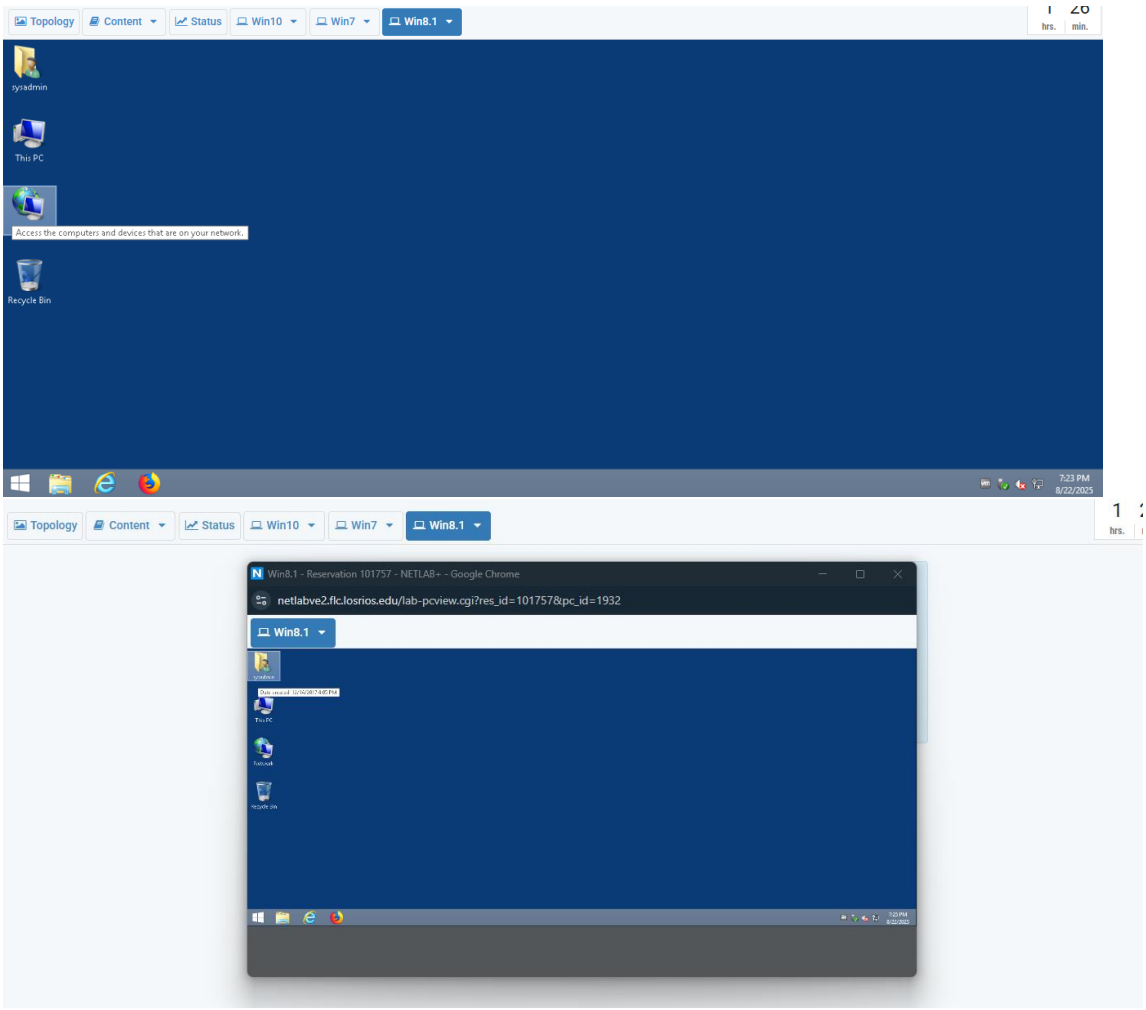
        - Has experience using ticketing systems such as ServiceNow, Jira, Zendesk
        - Networking and software troubleshooting understanding
    - Field Service Technician
        - A Valid Driver's License
        - Knows how to repair and diagnose hardware at the place
        - Very well time management and documentation taking skills
    - IT Technician/ Computer Technician
        - Knows how to assemble computers and replace compoents
        - Has experience doing disk management, Windows Installations and BIOS/UEFI
    - System Support Specialist
        - Experience scripting such as PowerShell, Bash
        - Knows Group Policy, Windows Server, Active Directory
    - Network Support Technician
        - Has experience and understanding of IP addressing, DNS, DHCP and Firewalls
        - Configuring routers/switches hands on experiences
    - Data Center Technician
        - Knows and is familiar with server maintenance, cabling, and rack mounted hardware
        - Knowledge of Linux operating system

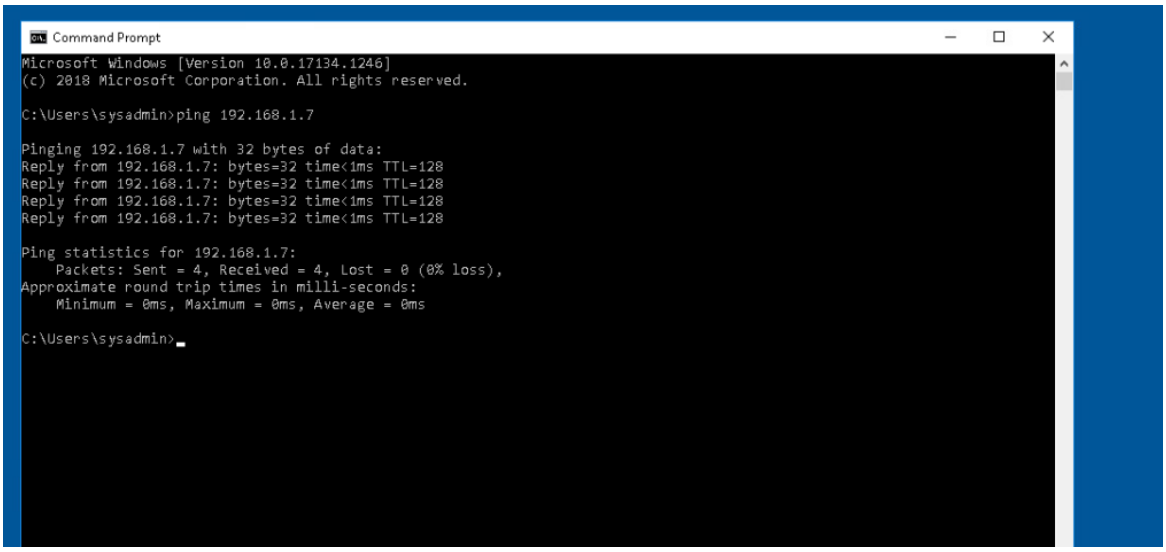
- Log on to Netlab NDG A+ V4,lab01, and perform the below exercise
    - Schedule two hours of lab time
    - Log on to all systems
    - Un-dock one system
    - Ping all other systems from each system to confirm connectivity to all endpoints.

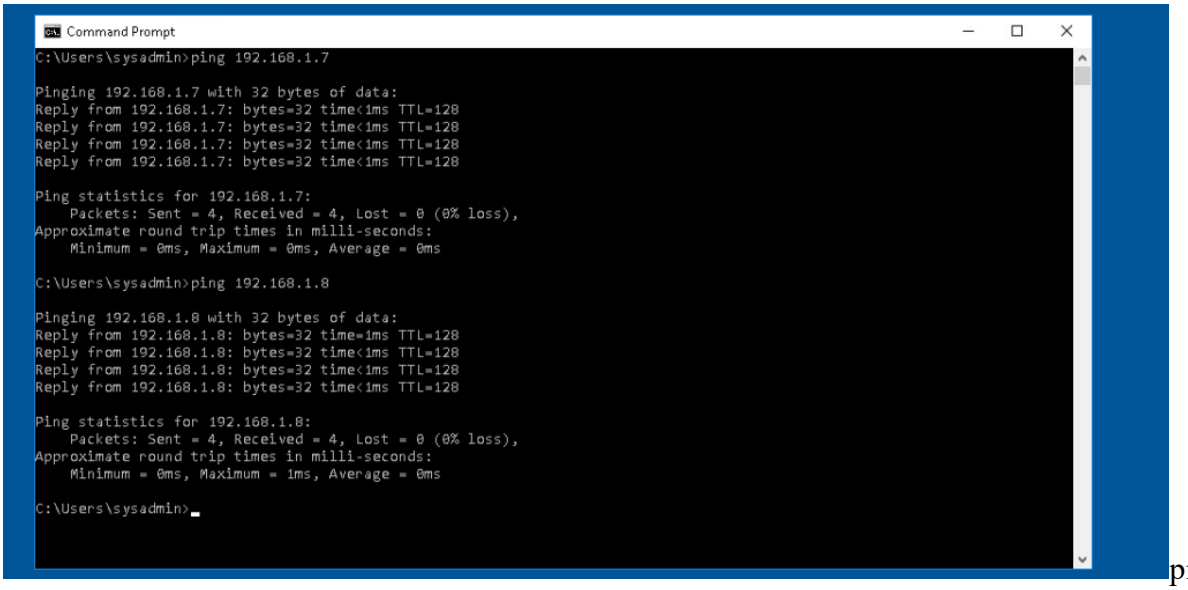
Part B:




Topology
Content
Status
Win10
Win7
Win8.1
1 hrs.
30 min.
sysadmin
This PC
Toolbox
Recycle Bin
11:19 AM
8/22/2025
Topology
Content
Status
Win10
Win7
Win8.1
hrs.
min.
sysadmin
Wireshark
Computer
Files
Network
Installs
Recycle Bin
Free PC Audit
7:22 PM
8/22/2025


Topology
Content
Status
Win10
Win7
Win8.1
sysadmin
This PC
Access the computers and devices that are on your network.
Recycle Bin
Win8.1 - Reservation 101757 - NETLAB+ - Google Chrome
netlabve2.flc.losrios.edu/lab-pcview.cgi?res_id=101757&pc_id=1932


Command Prompt
Microsoft Windows [Version 10.0.17134.1246]
(c) 2018 Microsoft Corporation. All rights reserved.
C:\Users\sysadmin>ping 192.168.1.7
Pinging 192.168.1.7 with 32 bytes of data:
Reply from 192.168.1.7: bytes=32 time<1ms TTL=128
Reply from 192.168.1.7: bytes=32 time<1ms TTL=128
Reply from 192.168.1.7: bytes=32 time<1ms TTL=128
Reply from 192.168.1.7: bytes=32 time<1ms TTL=128
Ping statistics for 192.168.1.7:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\Users\sysadmin>


Command Prompt
C:\Users\sysadmin>ping 192.168.1.7
Pinging 192.168.1.7 with 32 bytes of data:
Reply from 192.168.1.7: bytes=32 time<1ms TTL=128
Reply from 192.168.1.7: bytes=32 time<1ms TTL=128
Reply from 192.168.1.7: bytes=32 time<1ms TTL=128
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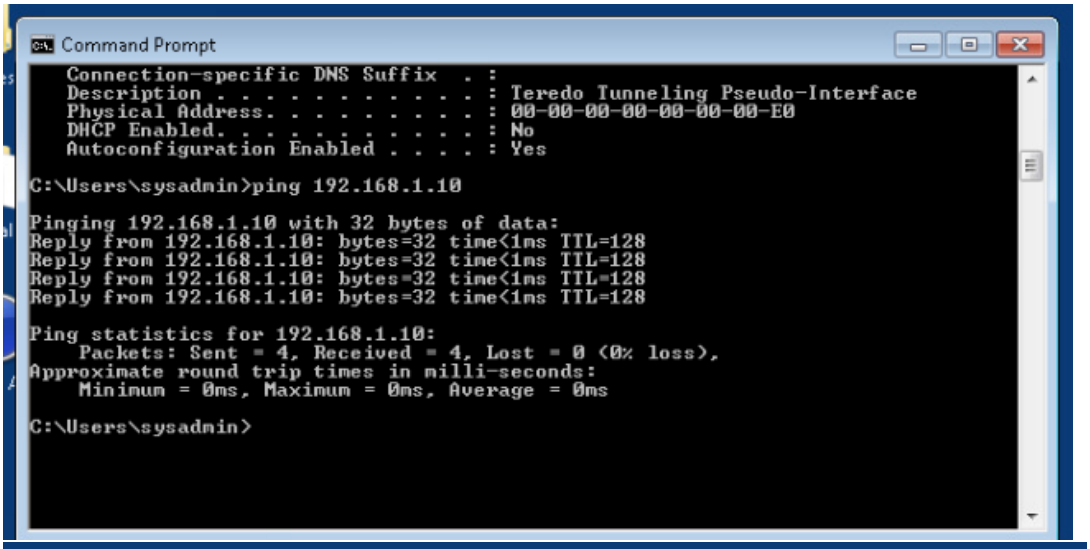
Ping statistics for 192.168.1.7:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\Users\sysadmin>ping 192.168.1.8
Pinging 192.168.1.8 with 32 bytes of data:
Reply from 192.168.1.8: bytes=32 time=1ms TTL=128
Reply from 192.168.1.8: bytes=32 time<1ms TTL=128
Reply from 192.168.1.8: bytes=32 time<1ms TTL=128
Reply from 192.168.1.8: bytes=32 time<1ms TTL=128
Ping statistics for 192.168.1.8:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 1ms, Average = 0ms
C:\Users\sysadmin>
pin


Command Prompt
Connection-specific DNS Suffix . :
Description . . . . . : Teredo Tunneling Pseudo-Interface
Physical Address. . . . . : 00-00-00-00-00-00-00-E0
DHCP Enabled. . . . . : No
Autoconfiguration Enabled . . . . : Yes
C:\Users\sysadmin>ping 192.168.1.10
Pinging 192.168.1.10 with 32 bytes of data:
Reply from 192.168.1.10: bytes=32 time<1ms TTL=128
Reply from 192.168.1.10: bytes=32 time<1ms TTL=128
Reply from 192.168.1.10: bytes=32 time<1ms TTL=128
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Ping statistics for 192.168.1.10:
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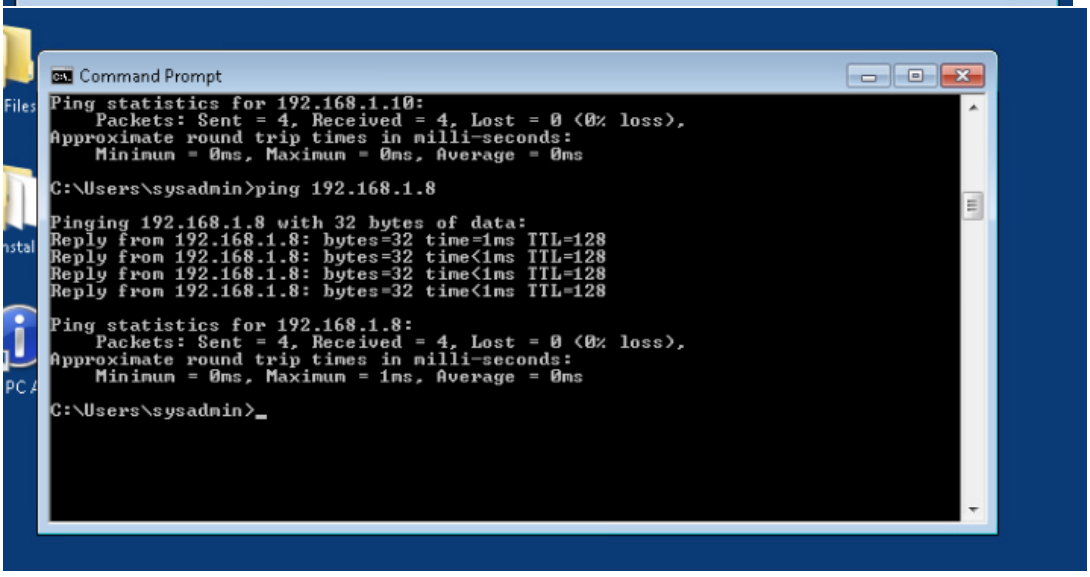
Command Prompt
Ping statistics for 192.168.1.10:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\Users\sysadmin>ping 192.168.1.8
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Reply from 192.168.1.8: bytes=32 time<1ms TTL=128
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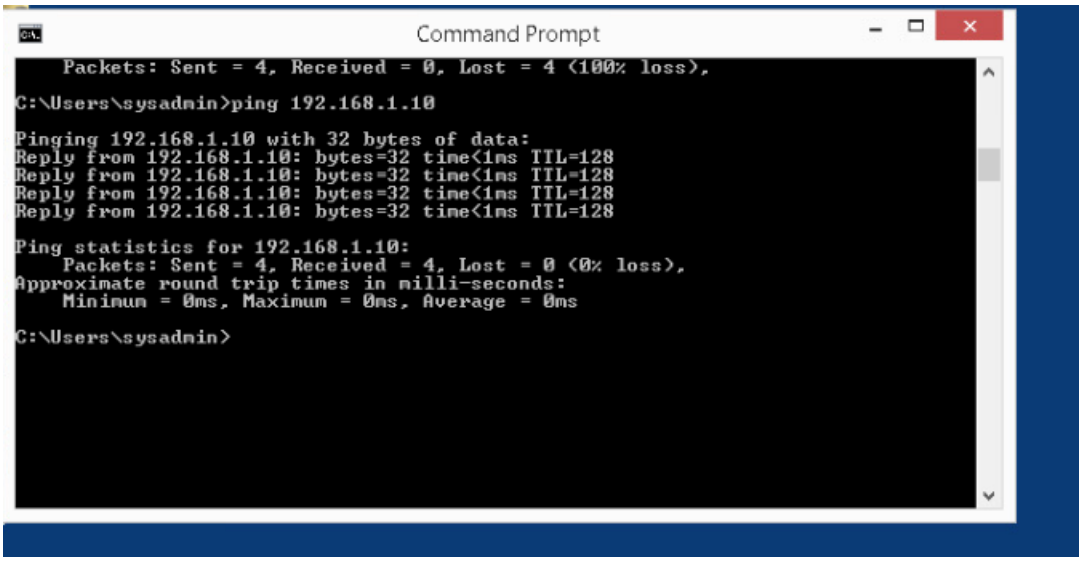
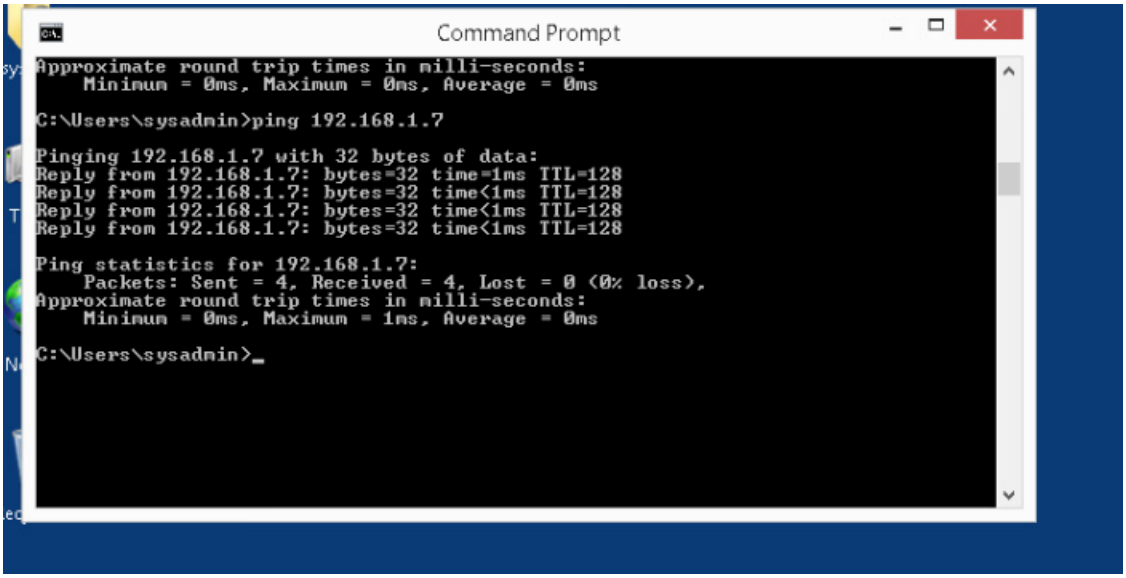

Command Prompt
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\Users\sysadmin>ping 192.168.1.10
Pinging 192.168.1.10 with 32 bytes of data:
Reply from 192.168.1.10: bytes=32 time<1ms TTL=128
Reply from 192.168.1.10: bytes=32 time<1ms TTL=128
Reply from 192.168.1.10: bytes=32 time<1ms TTL=128
Reply from 192.168.1.10: bytes=32 time<1ms TTL=128
Ping statistics for 192.168.1.10:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\Users\sysadmin>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C:\Users\sysadmin>_

- Share your anticipated learning outcomes from this class.
- Highlight notable aspects from the initial lecture.

Part C:

- My anticipated learning outcomes from this class are that I can get the CompTia A+ Certificate and find an internship or an entry level job related to Cybersecurity. I also want to leave this class knowing I can take apart and rebuild a computer and know the fundamentals of IT. I also want to leave this class knowing I know how to do the stuff and not just forget it and keep the information I learned forever instead of just listening with one ear and making it go out another.
- Some notable aspects from the initial lecture that I considered is that IT is a very broad field and there is still a lot to learn and the other part that learning does not stop it keeps on going. The cost of the certificates also blew my mind on how expensive they are for just the exam and the maintenance cost of them. $5,000 just for maintiance cost is very mind blowing for me that it even costs that much. Another notable piece of information was that other certificates have different definitions than for example CompTia does and I did not know that, so it is very amazing that I know that going forward when I want to expand my certificates. Computer Science and Cybersecurity are completely two different things. While everyone thinks that they are very similar I knew this before but hearing it from a Cybersecurity Professional this made me 100% stuck to that mindset. Another thing that was notable was that hands on experience is going to be the focus of this class and 30% is going to be technical, which I absolutely love because I love being able to do things hands on and not just read a textbook all day. You are going to treat us like workers and we get to experience the real world scenario of working in the field and letting us figure it out before we come to you to ask and even then you are not going to give us a straight answer and going to let us figure it out which I wanted in my other classes that I have taken but glad this is in the class.

- Add notes and screenshots
- Can you reproduce the lab with the questions and your screenshots with notes?
- If your boss asked you for this, did you provide the answer with context?