

# **NT1110 Computer Structure and Logic**

## **Study Guide**

**SHORT ANSWER 1.1 (2.0 HOURS)****Assessment Preparation Checklist:**

Perform the following tasks to prepare for this assessment:

- Read Chapter 8, pp. 281–303, from your textbook *Computer Structure and Logic*.  
This chapter examines the various Windows Operating Systems (OS) and their interfaces and tools. Linux and the Mac OS are also briefly covered, but the emphasis is on Windows.
- Go through this module’s lesson that covers the purpose and functions of operating systems.

**Title: The Purpose and Functions of an Operating System**

Describe the purpose and functions of an operating system. Explain at least five differences among Windows, Linux, and Mac OS X operating systems.

**Submission Requirements:**

Your response should be two- to three-page long. Include a header containing your name and the date on each page. Name the document **NT1110\_StudentName\_Module1\_Lab.doc**, replacing StudentName with your name. Use Arial 12-point font and double-line spacing.

**Evaluation Criteria:**

The [Short Answer rubric](#) will be used to evaluate this assessment.

## LAB 1.1 (2.0 HOURS)

**Assessment Preparation Checklist:**

Perform the following tasks to prepare for this assessment:

- Read Chapter 8, pp. 281–303 and 314–315 from your textbook *Computer Structure and Logic*.  
This chapter examines the various Windows operating systems and their interfaces and tools.
- Go through this module's lesson that covers the basics of operating systems.

**Title: Identifying the Operating System**

This assessment will help you identify a computer's operating system and the characteristics of the computer's RAM, hard disk drives, and optical disk drives. You will also analyze your lab or home computer from the point of view of upgrading it.

Respond to the following questions:

- Identify the operating system in your home or lab computer and check if there is any service pack installed for this operating system. Provide five features of the edition of the operating system on your computer.
- Identify the processor speed, amount of RAM, and disk space of the computer.
- Determine whether the operating system can be updated to a later version. For example, if you are using Windows Vista, can you update it to Windows 7?

Use the following website for more information and aid in your analysis:

<http://windows.microsoft.com/en-US/windows/downloads/upgrade-advisor>

**Required Setup and Resources:**

A Windows computer and a working Internet connection are required for this laboratory.

**Recommended Procedures:**

1. Go to **Device Manager**.
  - I. **For Windows XP:** Click **Start**. Right-click **My Computer** and click **Properties->Hardware->Device Manager**.
  - II. **For Vista or Windows 7:** Click **Start**. Right-click **Computer->Properties->Device Manager**.

2. In the **Device Manager** window that opens, view the details of each device attached to your computer by clicking the “+” icon beside each item in the list.

**Submission Requirements:**

- Submit your responses in a two- to three-page Microsoft Word document.
- Use 12-point Arial font and double spacing.
- Cite references from the textbook, the ITT Tech Virtual Library, or credible websites to substantiate your answers.

**Evaluation Criteria:**

The [Lab rubric](#) will be used to evaluate this assessment.

## SHORT ANSWER 2.1 (3.0 HOURS)

**Assessment Preparation Checklist:**

Perform the following tasks to prepare for this assessment:

- Read Chapter 3, pp. 61–105, from your textbook *Computer Structure and Logic*.  
This chapter examines various input/output (I/O) devices, their connections and the ports, and how these ports communicate with the central processing unit.
- Access Ebrary via the ITT Tech Virtual Library > Browse > Browse by Format > Books and read Chapter 2, pp. 11–16, and Chapter 3, pp. 17–36, from the textbook *Computer Hardware Course*. Chapter 2 explains various input devices, and Chapter 3 discusses the various output devices and their features.
- Go through the lesson for this module that examines how various I/O devices have made working with computers easy.

**Title: I/O Devices**

I/O devices enable us to control the computer and display information in a variety of ways.

Answer the following questions:

- What critical I/O devices are necessary to use a personal computer? Which ones are not necessary for normal day-to-day use and why?
- Why is a modem considered an I/O device?
- Though a printer is an essential I/O device, can you think of why it may also be classified as an input device?

**Submission Requirements:**

- Submit your response in a one- to two-page Microsoft Word document.
- Include a title page consisting of student name, course number, assignment, date, and instructor.
- Use Font: Arial, 12-point, and double spacing.

**Evaluation Criteria:**

The [Short Answer rubric](#) will be used to evaluate this assessment.

## LAB 2.1 (3.0 HOURS)

**Assessment Preparation Checklist:**

Perform the following tasks to prepare for this assessment:

- Read Chapter 3, pp. 61–105, from your textbook *Computer Structure and Logic*. In this chapter, you will learn about I/O devices, their connections, the ports they connect to, and how these ports communicate with the CPU.
- Go through this module's lesson that covers the various I/O devices attached to a computer and the ports that accept these devices.

**Title: Identifying I/O Ports and Devices**

This assessment is about the identification of I/O ports and devices linked to a computer. It is easy to accidentally unplug an I/O device. If you do, knowledge of the ports and the devices that connect to them will help you correctly reconnect the device.

**Required Setup and Tools**

In this laboratory, you need to:

- Look at the outside of a desktop or notebook computer.
- Access to the Internet for research.

Use the Lab 2 Worksheet to submit your responses.

**Submission Requirements:**

- Microsoft Word document containing descriptions of the results obtained in each step of the procedure for each task, including relevant screenshots, tables, and/or diagrams. **Note:** To grab a screenshot of the current window, such as the Internet Explorer window, press the Alt and Print Screen keys to put a copy of the screenshot onto the Windows clipboard, then switch to your Microsoft Word document and paste the screenshot into your document.
- Your report should be four- to five-page long. Include a header containing your name and the date on each page. Name the document **NT1110\_StudentName\_Module2\_Lab.doc**, replacing StudentName with your name. Use Arial 12-point font and double-line spacing.

**Evaluation Criteria:**

The [Lab rubric](#) will be used to evaluate this assessment.

QUIZ 1 (2.0 HOURS)

**Assessment Preparation Checklist:**

To prepare and score well in this quiz, you should:

- Read Chapter 8, pp. 281–322, from your textbook *Computer Structure and Logic*.
- Go through the Module 1 lesson that covers the purpose and functions of operating systems.

**Title: Quiz**

Take the quiz based on concepts covered in Module 1.



## DISCUSSION 3.1 (2.0 HOURS)

**Title: Processors and Their Characteristics**

Assume that you are an information technology (IT) consultant at an organization that creates high-resolution graphics and videos for an advertising company. Your organization wants to replace its old computers with new, improved ones. Your manager assigns you the task of studying the latest Intel and AMD processors and making a recommendation that is feasible and suits the organization's requirements.

Using the Internet and ITT Tech Virtual Library, gather information on the following:

- The latest Intel and AMD processors available
- Characteristics of these processors

Based on the information collected by you, answer the following questions:

- Which processor would you recommend for high-resolution graphics and video? Why?
- If a 1 GHz processor is replaced by a 2 GHz processor, do all programs execute twice as fast?

**Participation Requirements:**

Reply to your classmates with at least two responses. When responding to the discussion assessment, do the following:

- Provide complete, well-thought-out responses.
- Ask questions, share experiences, challenge ideas, and help your peers expand their responses.
- You must discuss your recommendations on the basis of the following two points:
  - The relationship between CPU clock speed and the power consumed by the processor
  - Reasons for choosing Intel processors over AMD or vice versa

**Please Note:** One-sentence answers will not be sufficient. If your answer is "I agree" or "I disagree," explain why you agree or disagree. Remember that the discussion assessment is your opportunity to interact with your fellow classmates. Observe discussion assessment etiquette: be respectful, kind, and nonjudgmental of your classmates.

**Evaluation Criteria:**

The [Discussion rubric](#) will be used to evaluate this assessment.

## SHORT ANSWER 3.1 (3.0 HOURS)

**Assessment Preparation Checklist:**

Perform the following tasks to prepare for this assessment:

- Read Chapter 4, pp. 115–152, from your textbook *Computer Structure and Logic*.  
This chapter discusses the motherboard and how it connects to everything else in the computer by using buses.
- Access Ebrary via the ITT Tech Virtual Library > Browse > Browse by Format > Books and read Chapter 10, pp. 99–107 and 120–127, from the textbook *Computer Hardware Course*.  
This chapter explains how to assemble a PC with various motherboards.
- Go through this module's lesson that covers motherboard specifications and layout.

**Title: Exploring the Motherboard and Busses**

The motherboard represents the logical foundation of the computer. Everything that makes a computer must be attached to the motherboard.

Answer the following questions:

- What are the major components of the motherboard? Provide a brief description of each component.
- Upgrading only the motherboard will give some performance improvement to a computer system. Why would the improvement be limited?
- What is the need for all the different busses found on a motherboard? Why can these busses not be replaced with a single bus?
- With 64-bit busses available, why should 32-bit busses be provided as well?

**Submission Requirements:**

- Submit your response in one- to two-page Microsoft Word document.
- Include a title page consisting of the title, assignment, date, instructor name, and student name.
- Use font: Arial, 12-point, and double spacing.

**Evaluation Criteria:**

The [Short Answer rubric](#) will be used to evaluate this assessment.

## LAB 3.1 (3.0 HOURS)

**Assessment Preparation Checklist:**

Perform the following tasks to prepare for this assessment:

- Read Chapter 4, pp. 115–152, from your textbook *Computer Structure and Logic*.  
This chapter discusses different motherboards and its components.
- Access Ebrary via the ITT Tech Virtual Library > Browse > Browse by Format > Books and read Chapter 10, pp. 99–107 and 120–127, from the textbook *Computer Hardware Course*.  
This chapter explains how to assemble a PC with various motherboards.
- Go through this module's lesson that covers motherboard specifications and layout.

**Title: Identify Motherboard Components and Form Factors**

In this lab, you will demonstrate the ability to examine and investigate the different types of motherboards and CPUs used in a computer.

**Required Setup and Tools**

Photos of motherboards and CPUs are provided in the lab worksheet. However, if possible, the case cover of a desktop computer should be removed in order to get a look inside the system at the motherboard. The system should be unplugged and off when this work is done. You also need access to the Internet for research.

Use the Lab 3 Worksheet to submit your responses.

**Submission Requirements:**

- Your lab report will be a Microsoft Word document containing descriptions of the results obtained in each step of the procedure for each task, including relevant screenshots, tables, and/or diagrams. **Note:** To grab a screenshot of the current window, such as the Internet Explorer window, press the Alt and Print Screen keys to put a copy of the screenshot onto the Windows clipboard and then switch to your Microsoft Word document and paste the screenshot into your document.
- Include a references page citing the resources you used from the textbook, ITT Tech Virtual Library, and credible websites to substantiate your answers. All citations should be in APA format. Refer to **ITT Tech Virtual Library > Research Help > Research Guides > Grammar, Writing & Style > APA Formatting and Style Guide** for help in APA formatting.

- Your report should be six- to eight-page long. Include a header containing your name and the date on each page. Name the document **NT1110\_StudentName\_Module3\_Lab2.doc**, replacing StudentName with your name. Use Arial 12-point font and double-line spacing.

**Evaluation Criteria:**

The [Lab rubric](#) will be used to evaluate this assessment.

## SHORT ANSWER 4.1 (1.5 HOURS)

**Assessment Preparation Checklist:**

Perform the following tasks to prepare for this assessment:

- Read Chapter 8, pp. 304–305, from your textbook *Computer Structure and Logic*.  
This section of the chapter examines various types of Windows file systems.
- Access CRCNetbase via the ITT Tech Virtual Library > Browse > Browse by Format > Books and read Chapter 2 from the textbook *Server Disk Management in a Windows Environment*.  
This chapter elaborates on the features and characteristics of various Windows file systems.
- Go through the lesson for this module, which explains the various Windows file systems.

**Title: Differentiating Between File Systems**

Differentiate between File Allocation Table (FAT) 32 and New Technology File System (NTFS) file systems.

In your response, answer the following questions:

- Which file system is intended primarily for use in large USB flash drives? Support your answer with a proper rationale.
- Which file system provides support for larger hard drives and better security in the form of encryption and permissions that restrict access by unauthorized users? Support your answer with a proper rationale.
- Why FAT32 is preferred over NTFS file system?

**Submission Requirements:**

- Submit your response in a one- to two-page Microsoft Word document.
- Use font: Arial, 12-point, and double spacing.

**Evaluation Criteria:**

The [Short Answer rubric](#) will be used to evaluate this assessment.

## LAB 4.1 (3.0 HOURS)

**Assessment Preparation Checklist:**

Perform the following tasks to prepare for this assessment:

- Read Chapter 6, pp. 195–228, and Chapter 8, pp. 304–305, from your textbook *Computer Structure and Logic*.  
In Chapter 6, you will learn about RAM, magnetic hard disk drives, and optical disk drives in detail. This chapter also describes how to install RAM and disk drives. Readings from Chapter 8 cover file systems.
- Go through this module's lesson that covers the various memories and storage devices attached to a computer.

**Title: Exploring RAM, Hard Disk Drives, and Optical Disk Drives**

This lab involves research on the size, speed, and slot type for RAM, as well as the model, interface type, capacity, and transfer rate of hard disks and optical disks in your computer system.

**Required Setup and Tools**

In this laboratory, you need:

- A desktop or notebook computer
- Access to the Internet for research

**Recommended Procedures****Task 1: Examining RAM**

To find out the types of RAM available to upgrade your computer, follow these steps:

1. **Acquire computer information:** Determine the make, model, and serial number of your computer by physically examining it. On a desktop computer, these numbers are on the back of the computer. For a laptop computer, this information is on the bottom of the computer. If the model and serial number are not clearly visible, refer to the manufacturer's website for this information; otherwise, select a laptop you would consider buying for yourself and use its model number to obtain the information.
2. **Acquire RAM Information from the OS:** You can determine the amount of RAM from the OS by performing the following steps:
  - I. For Microsoft Windows XP:  
Click **Start**→**Control Panel**→**System**. Under the **General** tab, you will find the type of

OS, the model of your computer, the type of CPU and its speed, and the amount of RAM.

II. For Microsoft Vista and Microsoft Windows 7:

Click **Start**→**Control Panel**→**System and Security**→**System**.

Take a screenshot of the window that appears.

3. **Check the computer manufacturer's website:** Go to the computer manufacturer's website and locate the support Web page. Look for the section that tells you the type and amount of RAM installed in your computer, depending on your computer's make, model, and serial number. Take a screenshot of the website with the information on RAM.
4. **Check the commercial RAM website:** Search the Internet for the commercial website of the manufacturer of the RAM by its name. Go to the RAM memory website and type in the make, model, and serial number, if required, of your computer. Search for the information on exact type and amount of RAM in your computer and the maximum size allowed. Take a screenshot of the website with the information on RAM.

### Task 2: Exploring the Hard Disk

To identify the characteristics of the hard disk drives on your computer, perform the steps:

1. Click **Start**. Right-click **My Computer** for Windows XP or **Computer** for Windows Vista or Windows 7.
2. Right-click **Local Disk (C:)** and click **Properties**.
3. Write down the used, free, and total capacity of drive C. Similarly, find this information for any other drives on your computer.
4. Click the **Hardware** tab and write down the type of interface, manufacturer, model number, and type of disk for the hard disk drives and optical disk drives on your computer. Take a screenshot of the window.
5. Access the disk manufacturer's website or a site that sells the drive and locate your particular model.
6. From the **Specifications** section, identify the type of disks on your computer. Take a screenshot of the specifications.

### Submission Requirements:

- Microsoft Word document containing descriptions of the results obtained in each step of the procedure for each task, including relevant screenshots, tables, and/or diagrams. *Note:* To grab a screenshot of the current window, such as the Internet Explorer window, press the Alt and Print Screen keys to put a copy of the screenshot onto the Windows clipboard and then switch to your Microsoft Word document and paste the screenshot into your document.
- Your report should be two- to four-page long. Include a header containing your name and the date on each page. Name the document NT1110\_StudentName\_Module4\_Lab.doc, replacing StudentName with your name. Use Arial 12-point font and double-line spacing.

**Evaluation Criteria:**

The [Lab rubric](#) will be used to evaluate this assessment.



## LAB 4.2 (2.0 HOURS)

**Assessment Preparation Checklist:**

Perform the following tasks to prepare for this assessment:

- Read Chapter 2, pp. 35–52, from your textbook *Computer Structure and Logic*. In this chapter, you will learn the basics of computer math, including the numbering systems used by computers, basic Boolean algebra, and how to measure data transfer.
- Go through this module's lesson that covers converting numbers from one system to another.
- Switch the Windows calculator from Standard Mode to Scientific Mode. Click **View** on the toolbar of the calculator and then choose **Programmer** to switch from Standard Mode to Scientific Mode.

**Title: Converting Numbers to Various Numbering Systems**

In this lab, you will demonstrate the ability to work with decimal and hexadecimal numbers.

**Required Setup and Tools**

In this lab, you will need only paper and pencil to do the required work. However, the use of a calculator is permitted to verify the results of a calculation. The Windows calculator may be used for this purpose. Use the Lab 4 Worksheet to submit your responses.

**Submission Requirements:**

- Your lab report will be a Microsoft Word document containing descriptions of the results obtained in each step of the procedure for each task, including relevant screenshots, tables, and/or diagrams. **Note:** To grab a screenshot of the current window, such as the Internet Explorer window, press the Alt and Print Screen keys to put a copy of the screenshot onto the Windows clipboard and then switch to your Microsoft Word document and paste the screenshot into your document.
- Your report should be seven- to eight-page long. Include a header containing your name and the date on each page. Name the document **NT1110\_StudentName\_Module3\_Lab1.doc**, replacing StudentName with your name. Use Arial 12-point font and double-line spacing.

**Evaluation Criteria:**

The [Lab rubric](#) will be used to evaluate this assessment.



**QUIZ 2 (2.0 HOURS)****Assessment Preparation Checklist:**

To prepare for this quiz:

- Read Chapter 2, pp. 35–52; Chapter 3, pp. 61–105; Chapter 4, pp. 115–152; and Chapter 5, pp. 161–186 from your textbook *Computer Structure and Logic*.
- Review the topic “Preparation for Quiz” in the online lesson and attempt the practice questions provided at the end of this topic.

**Title: Quiz**

Take the quiz based on concepts covered in Modules 2 and 3.

## DISCUSSION 5.1 (2.0 HOURS)

**Title: Security Basics**

What steps can be taken to overcome security issues in a computer, such as a virus threat or malicious e-mail attachments? In your response, address the following questions:

- Why should users be concerned about the security of their data and computer systems?
- What are the typical ways of user authentication while accessing a computer?
- How can you secure your wireless network?

**Participation Requirements:**

Reply to your classmates with at least two responses. When responding to the discussion, do the following:

- Provide complete, well-thought-out responses.
- Ask questions, share experiences, challenge ideas, and help your peers expand their responses.

**Note:** One-sentence answers will not be sufficient. If your answer is "I agree" or "I disagree," explain why you agree or disagree. Remember that the discussion assessment is your opportunity to interact with your fellow classmates. Observe discussion assessment etiquette: be respectful, kind, and nonjudgmental of your classmates.

**Evaluation Criteria:**

The [Discussion rubric](#) will be used to evaluate this assessment.

## SHORT ANSWER 5.1 (2.0 HOURS)

**Assessment Preparation Checklist:**

To prepare for this assessment:

- Read Chapter 7, pp. 237–271, from your textbook *Computer Structure and Logic*.  
This chapter discusses the purpose of the basic input/output system (BIOS) and how it relates to power-on self-test (POST) as the computer attempts to start.
- Access Ebrary via the ITT Tech Virtual Library > Browse > Browse by Format > Books and read Chapter 12, pp. 147–155, from the textbook *Computer Hardware Course*.  
This chapter explains how a computer starts with the help of the BIOS and how the POST portion of the BIOS enables the BIOS to find and report errors in the computer hardware.
- Go through this module's lesson that discusses the BIOS, POST, and error messages and codes that may appear during start-up of a computer.

**Title: Understanding the BIOS and POST**

Research your textbook, ITT Tech Virtual Library, and the Internet to answer the following questions:

- Why is it necessary to use ROM for the BIOS and not RAM?
- How do the POST beep codes make troubleshooting a computer start-up problem easier?
- Why is the hard disk busy when performing a cold boot?
- How can you recover your system from a failed BIOS update?

**Submission Requirements:**

- Submit your response in a one- to two-page Microsoft Word document.
- Use font: Arial, 12-point, and double spacing.
- Include a references page citing the resources you used from the textbook, ITT Tech Virtual Library, and credible websites to substantiate your answers. All citations should be in APA format. Refer to **ITT Tech Virtual Library > Research Help > Research Guides > Grammar, Writing & Style > APA Formatting and Style Guide** for help in APA formatting.

**Evaluation Criteria:**

The [Short Answer rubric](#) will be used to evaluate this assessment.

## LAB 5.1 (3.0 HOURS)

**Assessment Preparation Checklist:**

To prepare for this assessment:

- Read Chapter 7, pp. 237–271, and Chapter 9, pp. 331–360, from your textbook *Computer Structure and Logic*.  
In Chapter 7, you will learn how the POST portion of the BIOS enables the BIOS to find and report errors in the computer's hardware. Chapter 9 discusses how computers can be protected by against security breaches, identity theft, and lost hardware.
- Access Ebrary via the ITT Tech Virtual Library > Browse > Browse by Format > Books and read Chapter 10, pp. 99–107 and 120–127, from the textbook *Computer Hardware Course*.
- Go through this module's lesson that covers the BIOS, POST, and the basic security practices for your computer.

**Title: Understanding BIOS, POST, and Security Basics**

In this lab, you will demonstrate your ability to fix issues related to BIOS/POST and secure the computer from viruses and Trojans.

**Required Setup and Tools**

A computer with access to the Internet

**Recommended Procedures****Task 1: Understanding BIOS and POST**

A user boots his or her computer and hears a sequence of six beeps. The computer uses AMI BIOS. What error is indicated by the six beeps? A different user with a computer using Phoenix BIOS hears a sequence of beeps with pauses in between. The sequence is beep - pause - beep beep beep - pause - beep beep beep beep - pause - beep beep beep. What error is indicated by this beep sequence?

**Task 2: Basic Security**

Firewalls may be hardware devices or software programs. Hardware firewalls protect an entire network. Software firewalls protect a single computer. Research the Internet for an example of each of these types of firewalls and compare their features. Linksys and Cisco make firewall/routers for home use. The Zone labs are an example of a software firewall.

**Submission Requirements:**

- Include a references page citing the resources you used from the textbook, ITT Tech Virtual Library, and credible websites to substantiate your answers. All citations should be in APA format. Refer to **ITT Tech Virtual Library> Research Help> Research Guides> Grammar, Writing & Style> APA Formatting and Style Guide** for help in APA formatting.
- Your report should be two- to four-page long. Include a header containing your name and the date on each page. Name the document **NT1110\_StudentName\_Module5\_Lab.doc**, replacing StudentName with your name. Use Arial 12-point font and double-line spacing.

**Evaluation Criteria:**

The [Lab rubric](#) will be used to evaluate this assessment.

## Lab 6.1 (2.0 HOURS)

**Assessment Preparation Checklist:**

Perform the following tasks to prepare for this assessment:

- Read Chapter 10, pp. 369–403, and Chapter 11, pp. 413–452, from your textbook

*Computer Structure and Logic*.

Chapter 10 discusses the tools and concepts of troubleshooting. Chapter 11 discusses the basics of computer networking with focus on TCP/IP, its applications and technologies.

- Go through this module's lesson that covers concepts of computer networking and troubleshooting.

**Title: Troubleshooting Networking Issues**

A good troubleshooter should be capable of discerning whether the problem is software or hardware related and repair all of these problems. In this lab, you will demonstrate your ability to use the six-step troubleshooting model to fix a networking issue and outline the steps toward a solution.

**Required Setup and Resources:**

A computer with access to the Internet

Before starting work on Task 1, perform the following steps:

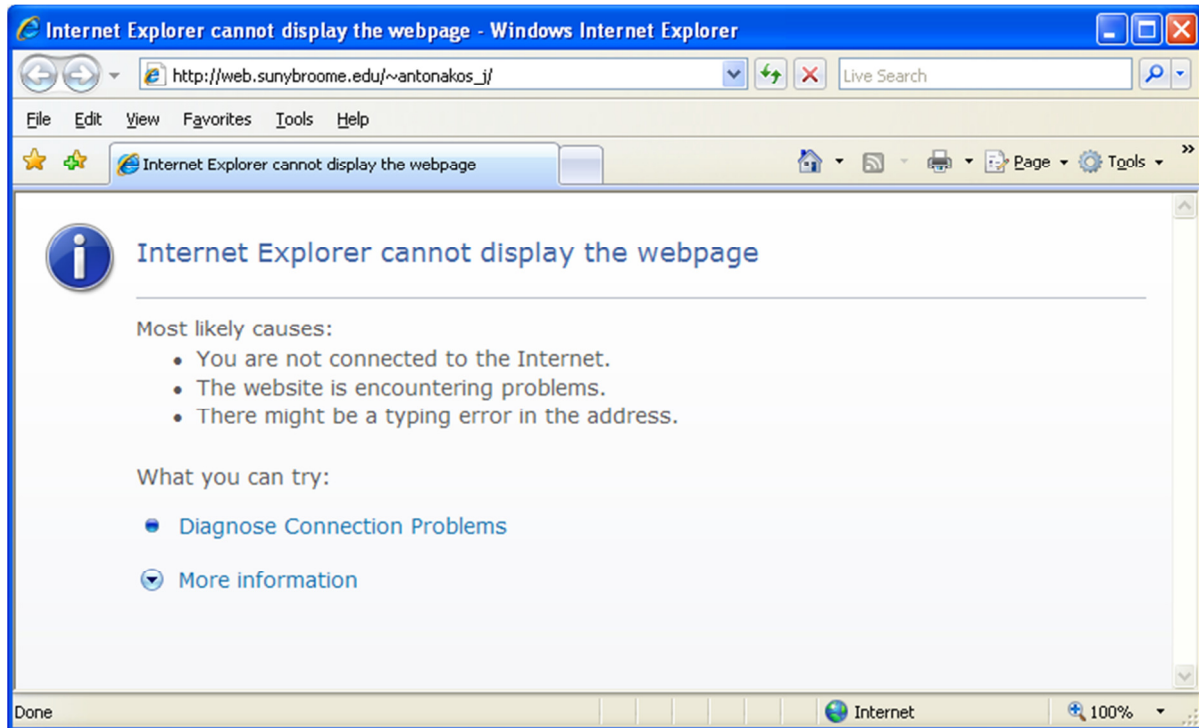
1. Open Internet Explorer. Click the **Tools** menu and select **Internet Options**.
2. Click the **Connections** tab.
3. Click the **LAN Settings** button.
4. In the **Proxy Server** section, select **Use a proxy server for your LAN**. Then, click the **Advanced** button.
5. In the Proxy Settings window, enter 192.168.100.1 for the HTTP proxy address and port 80 for the port.

**Note:** Remember to reset the proxy settings to their original values when Task 1 is finished.



**Recommended Procedures****Task 1: Network Troubleshooting**

When you boot your computer and open Internet Explorer, this is what you see:



Apply the six-step troubleshooting model to the problem. Document everything associated with each step of the troubleshooting model.

1. Ascertain what the problem is.
2. Write down probable causes of the problem.
3. Determine if theories are correct through testing.
4. Create and implement a plan to resolve the problem.
5. Verify that the problem has been fixed; employ preventative measures.
6. Document the entire process.

**Task 2: Using the IPCONFIG utility**

1. Open the command window. Do this by clicking **Start** and then clicking **Run**. Type **CMD** into the Open text box and click **OK**. Alternatively, you can open the **Accessories** folder and select the **Command Prompt** tool.

2. Type the command **IPCONFIG/ALL** and press **Enter**. What do you see? It would be a good idea to grab a screenshot of the command window. (You may need to resize the command window to capture all the information. If you place the mouse over the bottom edge of the window and then click and hold, you can drag the window edge to resize the window.)
3. Type the command **IPCONFIG /RELEASE** and press **Enter**. What do you see?
4. Open Internet Explorer. What do you see?
5. Type the command **IPCONFIG /RENEW** and press **Enter**. What do you see?
6. Type the command **IPCONFIG /ALL**. Have the Lease Obtained/Expired times changed?

Use the Lab 6 Worksheet to submit your responses.

**Submission Requirements:**

- Your lab report will be a Microsoft Word document containing your answer to the questions in Task 1 and the results obtained in Task 2, including tables and/or diagrams.
- Your report should be two- to four-page long. Include a header containing your name and the date on each page. Name the document **NT1110\_StudentName\_Module6\_Lab.doc**, replacing StudentName with your name. Use Arial 12-point font and double-line spacing.

**Evaluation Criteria:**

The [Lab rubric](#) will be used to evaluate this assessment.

**FINAL EXAM (2.0 HOURS)****Assessment Preparation Checklist:**

To prepare for the final exam, you should:

- Read Chapters 1–11 from your textbook *Computer Structure and Logic*.
- Go through the lesson for this module that reviews the basic concepts and definitions you learned in the course.

**Title: Final Exam**

Take the final exam based on the concepts covered in Modules 1 through 6.