The utilization of VMs to understand the principles of ethical hacking has become common within cybersecurity. In this assignment, we will walk through the basics of vulnerability analysis and show the ease with which a vulnerability can be exploited to gain root access of a system.

View the "Lab 3 Your First Hack Part 1 Lab" video within the "Video Playlist: Penetration Testing and Risk Management," located in the topic resources.  
Utilizing the Kioptrix 1 VM, conduct a scan of the system from your Kali box to examine vulnerabilities within the system. After identifying and categorizing the vulnerabilities, conduct an analysis and mapping of the vulnerabilities.

* Perform an NMAP scan of the system.
* Create a slide presentation (8-10 slides) of your findings (screenshots) with embedded video detailing the following:  
  - Conduct the enumeration/footprinting of the Kioptrix 1 machine.  
  - Provide at least 3 additional NMAP commands and screenshots not utilized in the lab video.  
  - Explain flaw hypothesis methodology and provide a hypothesis based on your findings.  
  - Create and apply a vulnerability map of a system.  
  - Explain the flaws found, research at least two, and detail possible root causes of the flaws.  
  - Include commands.

APA style is not required, but solid academic writing is expected.

This assignment uses a rubric. Please review the rubric prior to beginning the assignment to become familiar with the expectations for successful completion.

You are not required to submit this assignment to LopesWrite.