

OLD DOMINION UNIVERSITY

CYSE 301 CYBERSECURITY TECHNIQUES AND OPERATIONS

Assignments #6 Hide your secret!

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Below is the lab report.

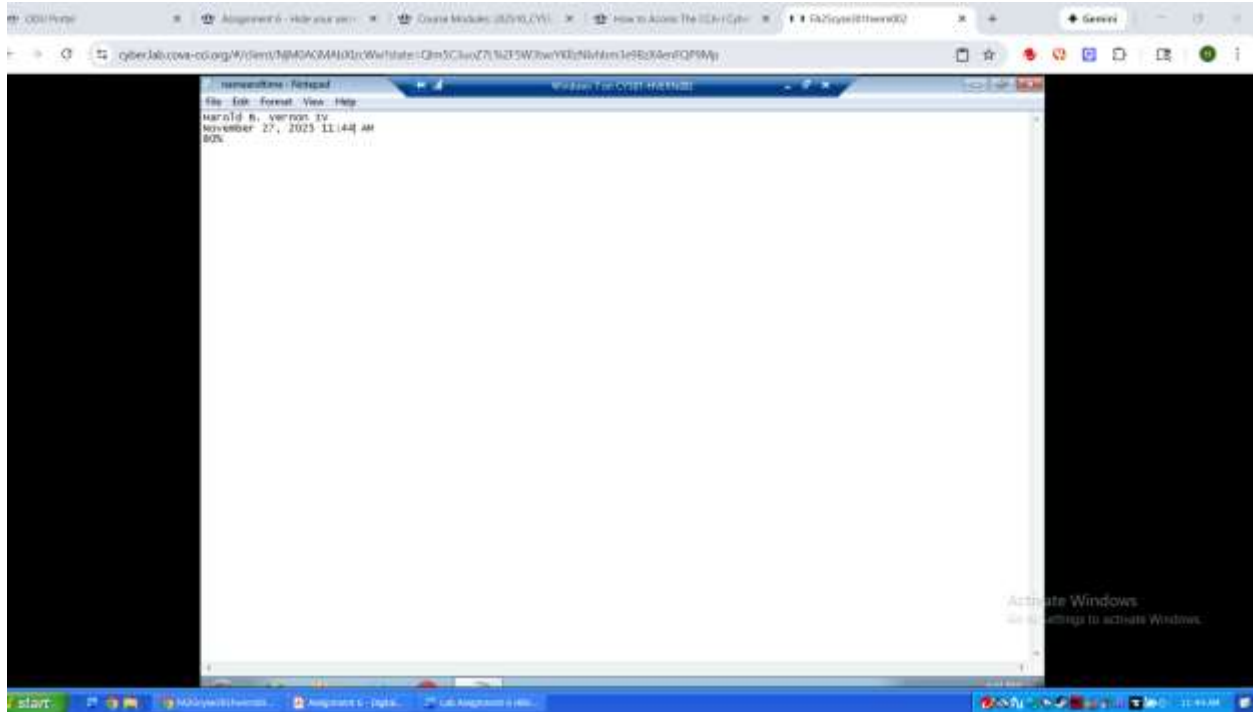
TASK A

1. Explain what steganography is and how it differs from cryptography?

Steganography refers to hiding one message inside another. In cybersecurity particularly, this means hiding one computer file inside another. This differs from cryptography because cryptography refers to using encryption to conceal the contents of a message. Hiding a .txt file reading “my top secret message” in a .png file of a cat is steganography. Keeping the .txt file but replacing “my top secret message” with “tf avw zljyla tlzzhnl” is cryptography.

TASK B

1. Create a text file containing the answers to the following questions:
 - What are your name and current date and timestamp?
 - What is your expected grade in this course?

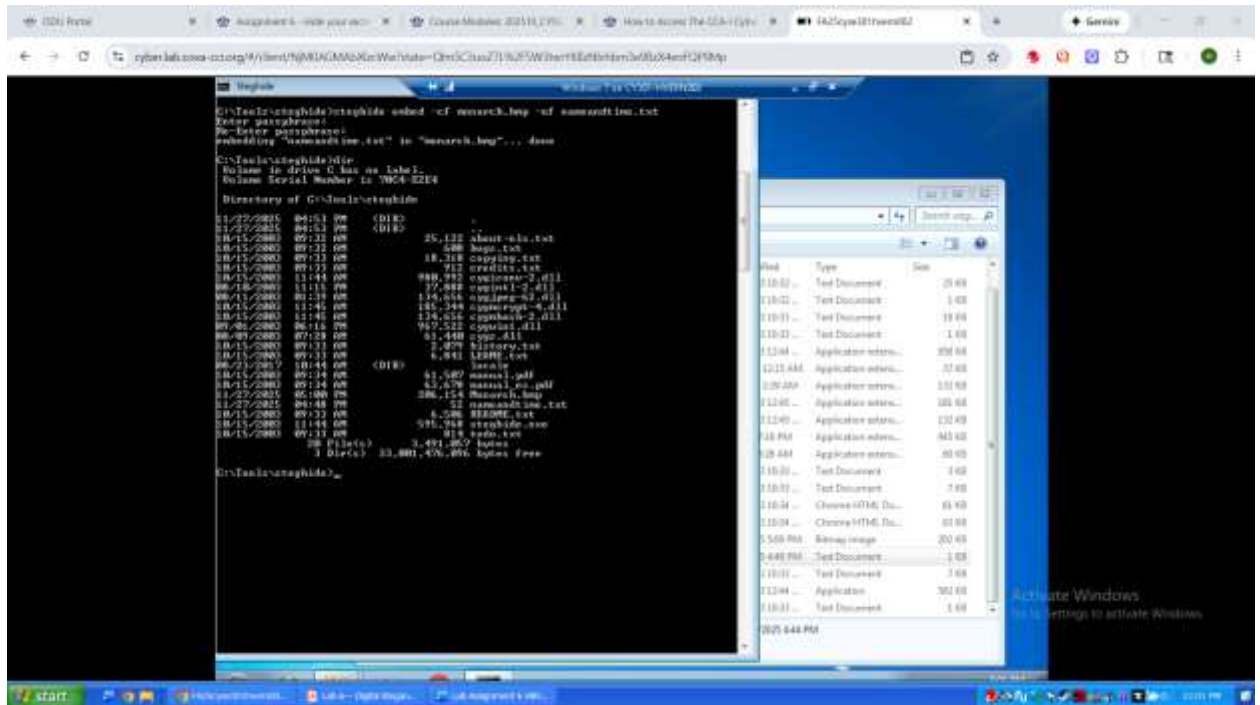


Explanation:

Above, a text file has been created in the Windows 7 VM showing my name, the date, the timestamp, and my expected grade.

2. Complete the following tasks using steghide command:

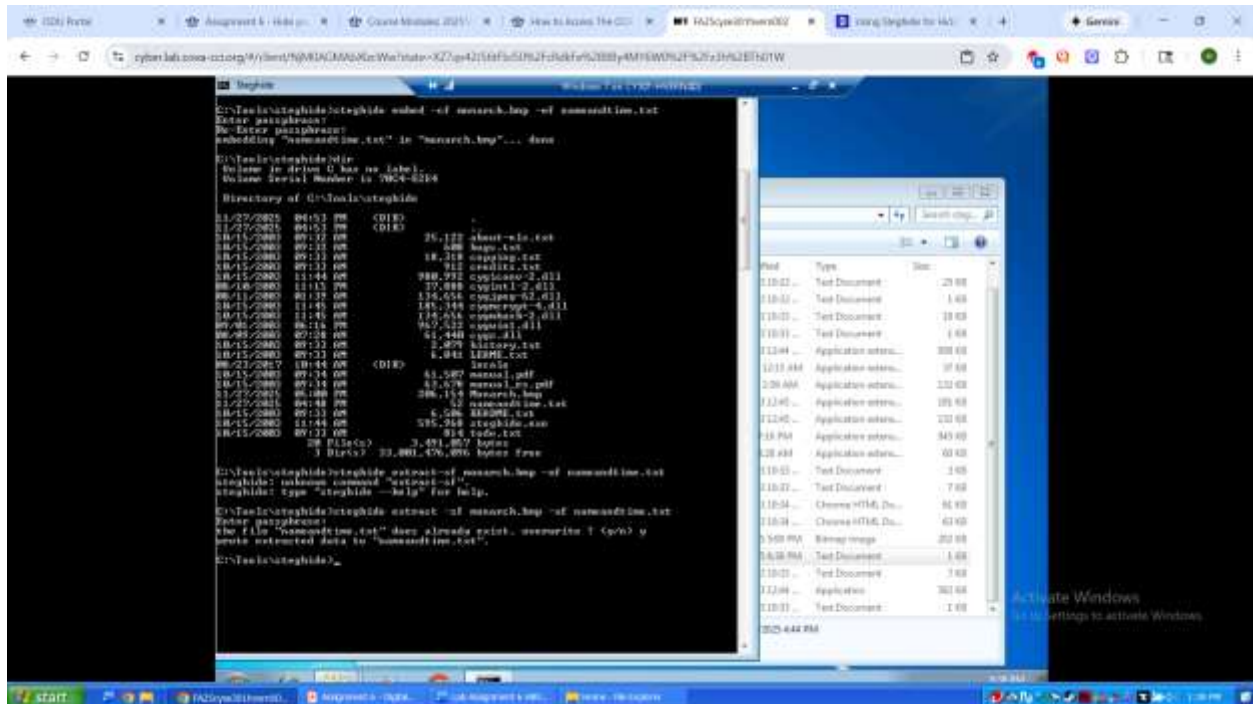
- Use **steghide** to hide this text file in the cover image, " Monarch.bmp.", which you can find in Windows7 under VMShare folder--> Lab-Resources--> Module 6.
- Use hvern002 as the name of the STEGO file.
- Use 01265958 as the password.
- List the contents of the current directory/folder to verify if the stego file is created or not.



Explanation:

Above, the contents of C:\Tools are listed. The results of steghide can be observed.

3. Extract the secret message by executing steghide command and save in a file named "extracted_HaroldVernon.txt".



Explanation:

Above, I have run the steghide command to extract the secret message.

