

For this assignment, PDF submission is allowed. Each student must submit the pdf file containing the answers to the following questions to get full credit.

Lab Preparation:

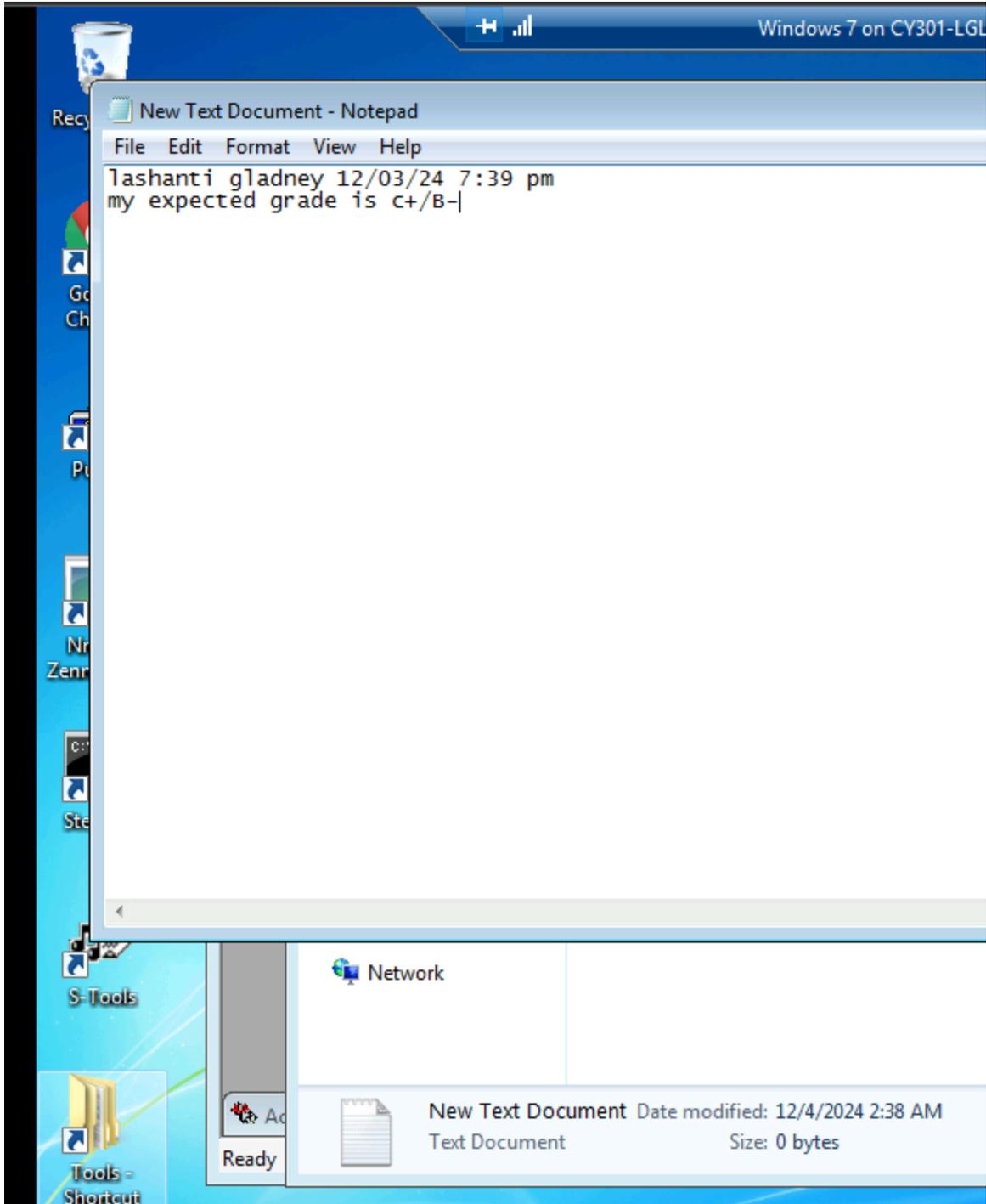
- Access a Windows7 VM in CCIA .

Assignment details:

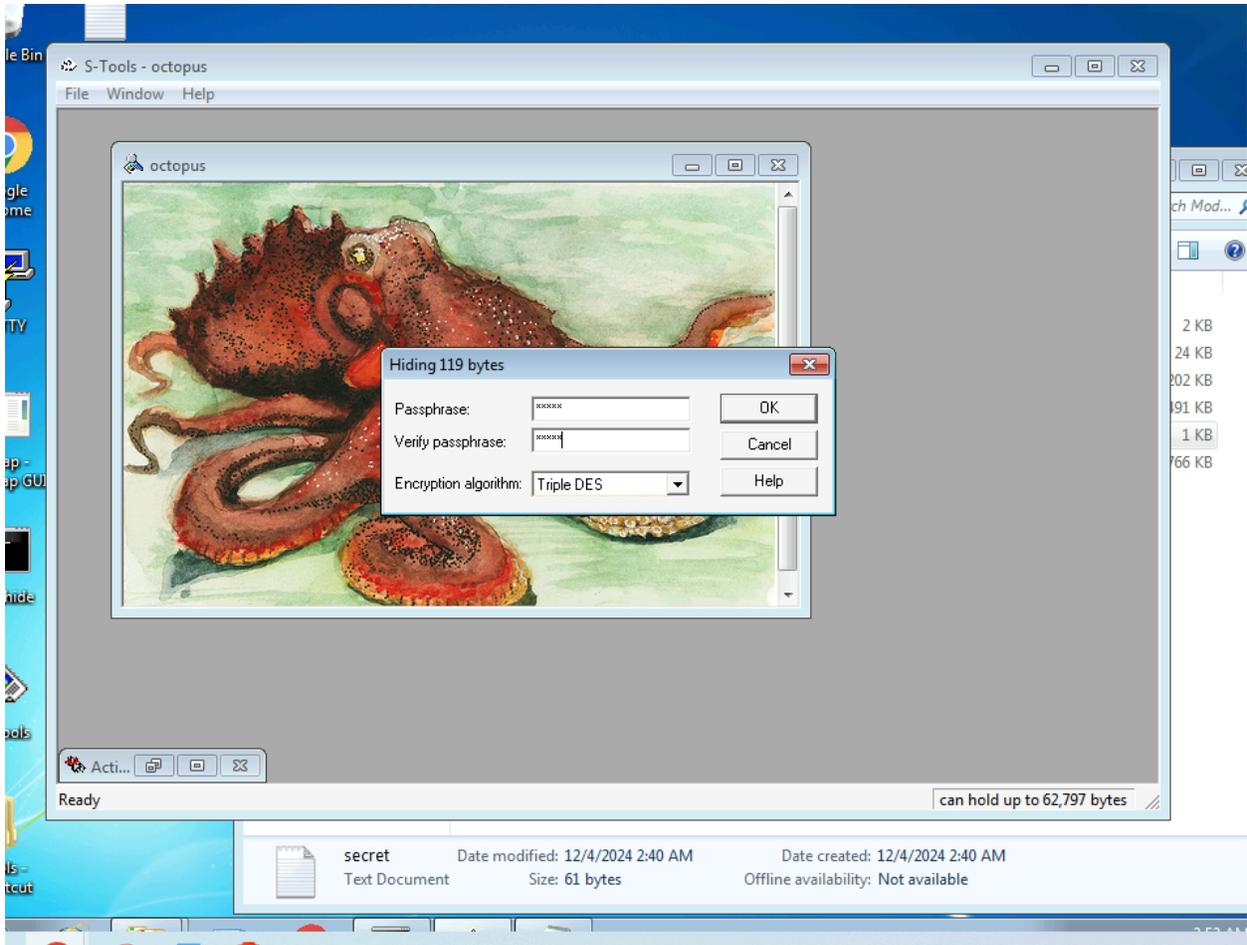
You need to use steghide, not s-tool to complete this assignment. Your local path may be different depending on the folder where you extract the executable file. Make sure you are working on the right directory.

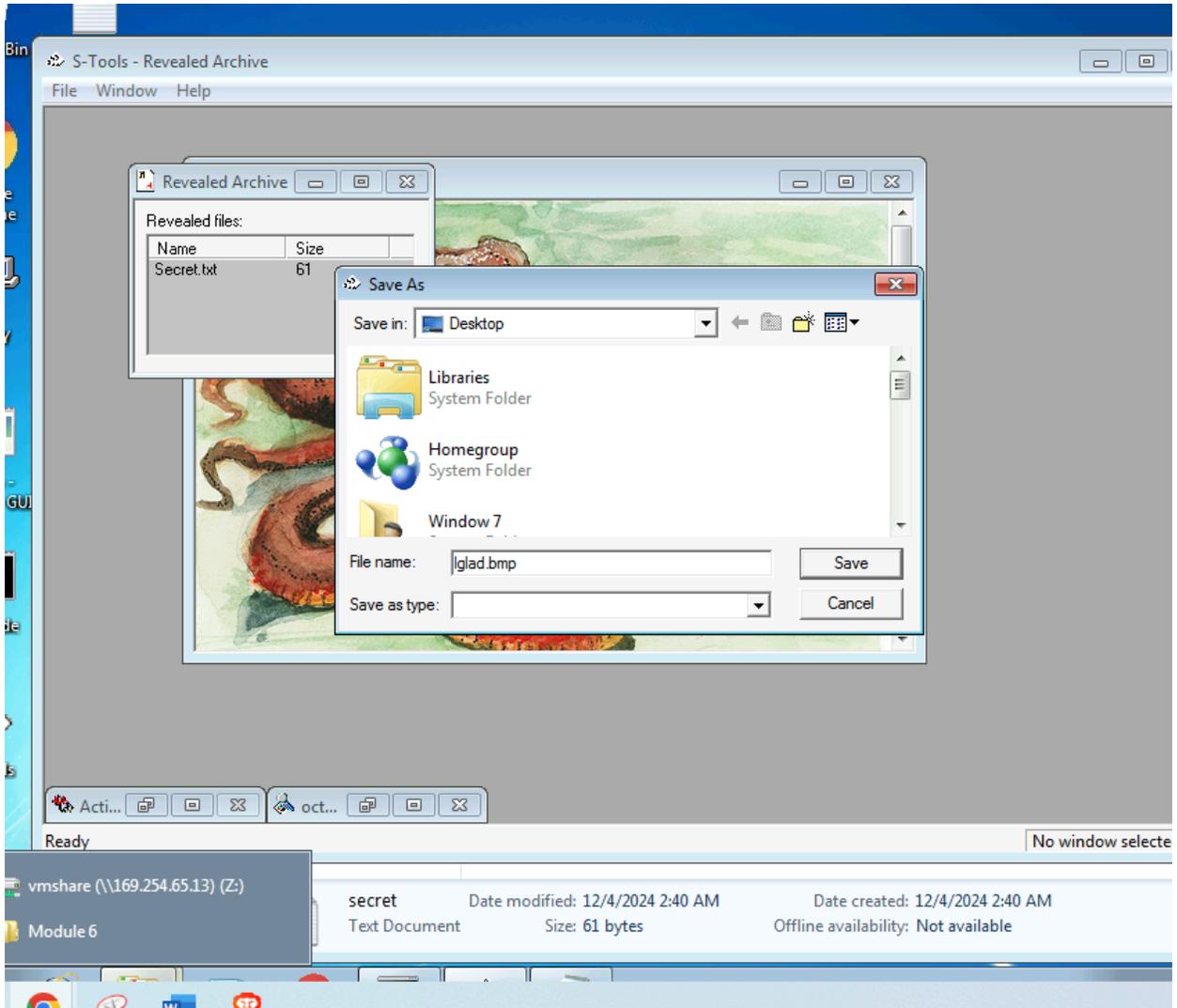
1. [10 Points] Create a text file containing the answers to the following questions:

- What are your name and current date and timestamp?
- What is your expected grade in this course?



2. [50 Points] Use steghide to hide this text file in the cover image, " octopus.bmp."
- Use your own UIN (for example, 01000123) as the password for encryption (you can choose any encryption algorithm from the given options).
 - Use your Midas ID (all lowercase) for example "svatsa.bmp" as the name of the STEGO file.
- Password- lglad





3. [20 Points] Extract the secret message by executing steghide command with --extract option as follows:

```
08/07/2008 07:28 AM 81,118 egg.jar
10/15/2003 09:33 AM 2,079 history.txt
10/15/2003 09:33 AM 6,841 LEAME.txt
12/04/2024 02:58 AM 61 lgld.bmp
08/23/2017 10:44 AM <DIR> locale
10/15/2003 09:34 AM 61,507 manual.pdf
10/15/2003 09:34 AM 63,678 manual_es.pdf
12/04/2024 02:36 AM 206,154 Monarch.bmp
12/04/2024 02:36 AM 502,554 octopus.bmp
10/15/2003 09:33 AM 6,506 README.txt
12/04/2024 02:40 AM 61 secret.txt
10/15/2003 11:44 AM 595,968 steghide.exe
10/15/2003 09:33 AM 814 todo.txt
22 File(s) 3,993,681 bytes
3 Dir(s) 33,048,129,536 bytes free

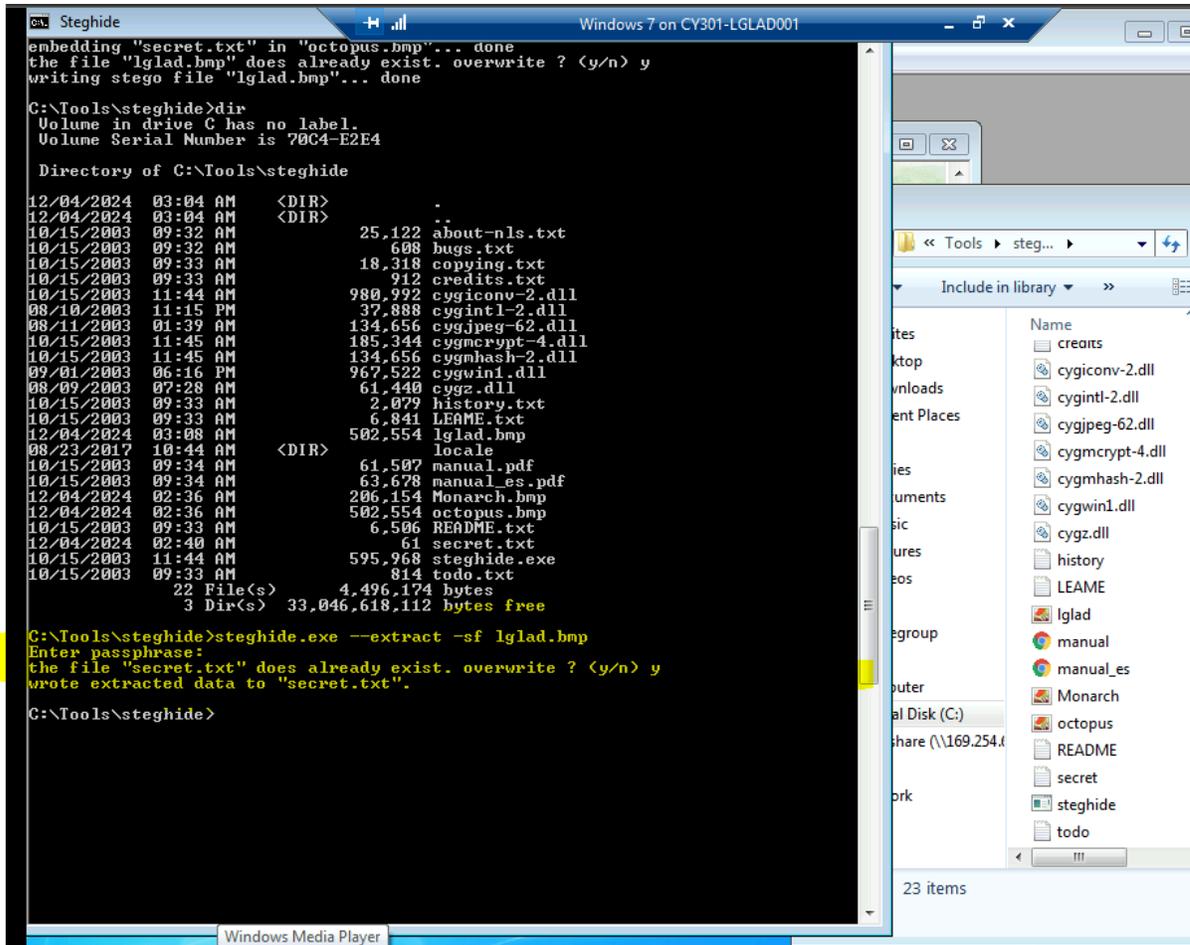
C:\Tools\steghide>steghide.exe --embed secret.txt -cf octopus.bmp -sf lgld.bmp
steghide: unknown command "--embed".
steghide: type "steghide --help" for help.

C:\Tools\steghide>steghide.exe --embed -ef secret.txt -cf octopus.bmp -sf lgld.
bmp
Enter passphrase:
Re-Enter passphrase:
embedding "secret.txt" in "octopus.bmp"... done
the file "lgld.bmp" does already exist. overwrite ? (y/n) y
writing stego file "lgld.bmp"... done

C:\Tools\steghide>
```

4. [10 Points] Execute the command to list the contents to verify whether the textfile with secret message has been extracted or not.

You should see textfile there because it was hidden in the jpeg image file and appeared after extracting the image file in the previous step.



5. [10 Points] Execute the command to display the contents of the file you revealed.

