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ITN 276 - Alternate Data Stream in NTFS

Screen Capture 1:

> The size of the file was 28

The screenshot shows a Windows desktop environment. On the left, a Windows PowerShell window is open, displaying the following commands and output:

```
Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/powershell

PS C:\Users\James> cd C:\Users\James\OneDrive\Desktop\ForensicsLabs\ModuleLab4
PS C:\Users\James\OneDrive\Desktop\ForensicsLabs\ModuleLab4> dir

Directory: C:\Users\James\OneDrive\Desktop\ForensicsLabs\ModuleLab4

Mode                LastWriteTime         Length Name
----                -
-r-----          5/25/2023   9:05 AM             28 adsLab.txt
-r-----          5/25/2023   9:05 AM          318346 sct.png

PS C:\Users\James\OneDrive\Desktop\ForensicsLabs\ModuleLab4>
```

On the right, a web browser window is open, displaying a course page for NTFS partition. The page includes a sidebar with navigation links (Home, Announcements, Syllabus, Modules, Discussions, Grades, Quizzes, Assignments, People, NOVA Policies, Tutor.com: 24/7 Online Tutoring, Library Resources, Career Connection) and a main content area with the following text:

NTFS partition ( Windows machine or Windows VM)  
A forensic tool to display the Stream - Streams by SysInternals (available from <http://live.sysinternals.com/Files/>).

**Lab Steps:**

**Create a Default Stream in a File**

1. On your Desktop Create a file named txt [You can create the file by using Notepad or CLI]
2. Insert a line " This is the Default Stream" in your adsLab.txt file [ You can use either Notepad or CLI to write on the file]
3. Open the file using Notepad or CLI, and check the file size of the adsLab.txt. Take a screen capture like below, and mark the size of the file.

The screenshot shows a command prompt window with the following output:

```
C:\Users\IEUser\Desktop>echo This is Default Stream > adsLab.txt

C:\Users\IEUser\Desktop>dir
Volume in drive C is Windows 10
Volume Serial Number is B809-E7A9

Directory of C:\Users\IEUser\Desktop

01/07/2023  08:36 PM    <DIR>          .
01/07/2023  08:36 PM    <DIR>          ..
01/07/2023  08:36 PM                28 adsLab.txt
03/13/2019  09:00 AM          1896 enla-link
                2 File(s)          921 bytes
                2 Dir(s)  20,865,847,296 bytes free
```

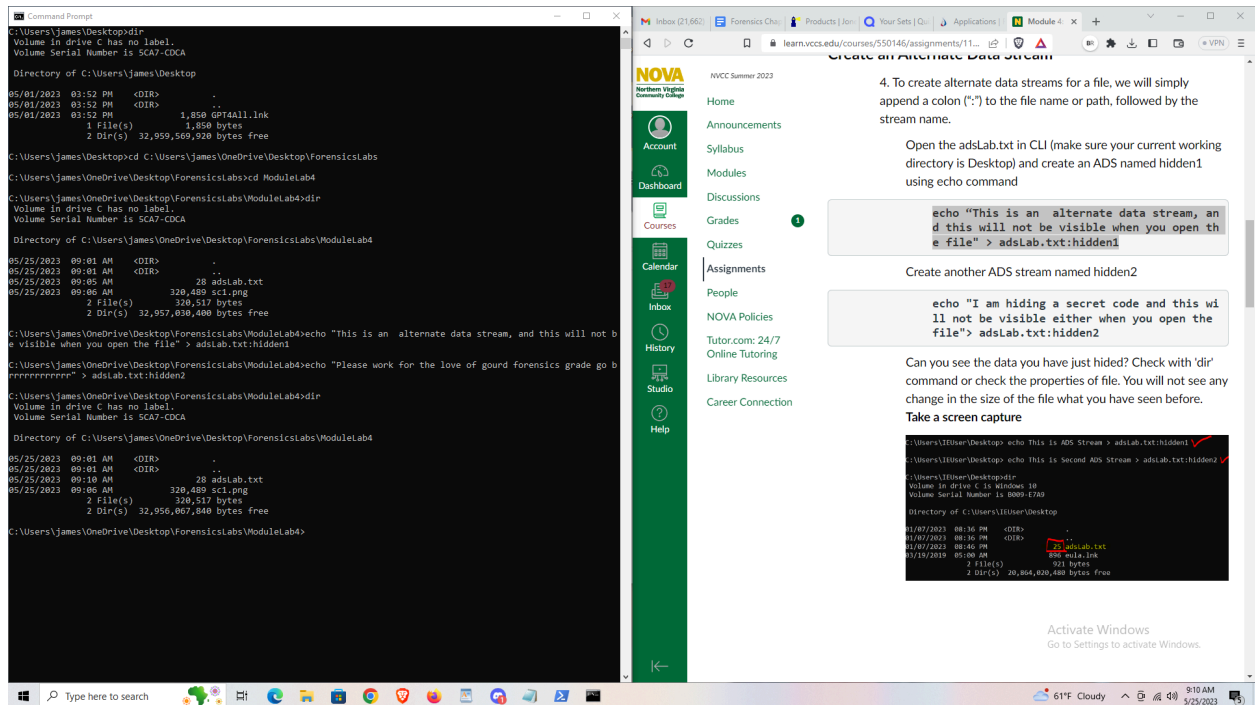
**Create an Alternate Data Stream**

4. To create alternate data streams for a file, we will simply append a colon (":") to the file name or path, followed by the stream name.

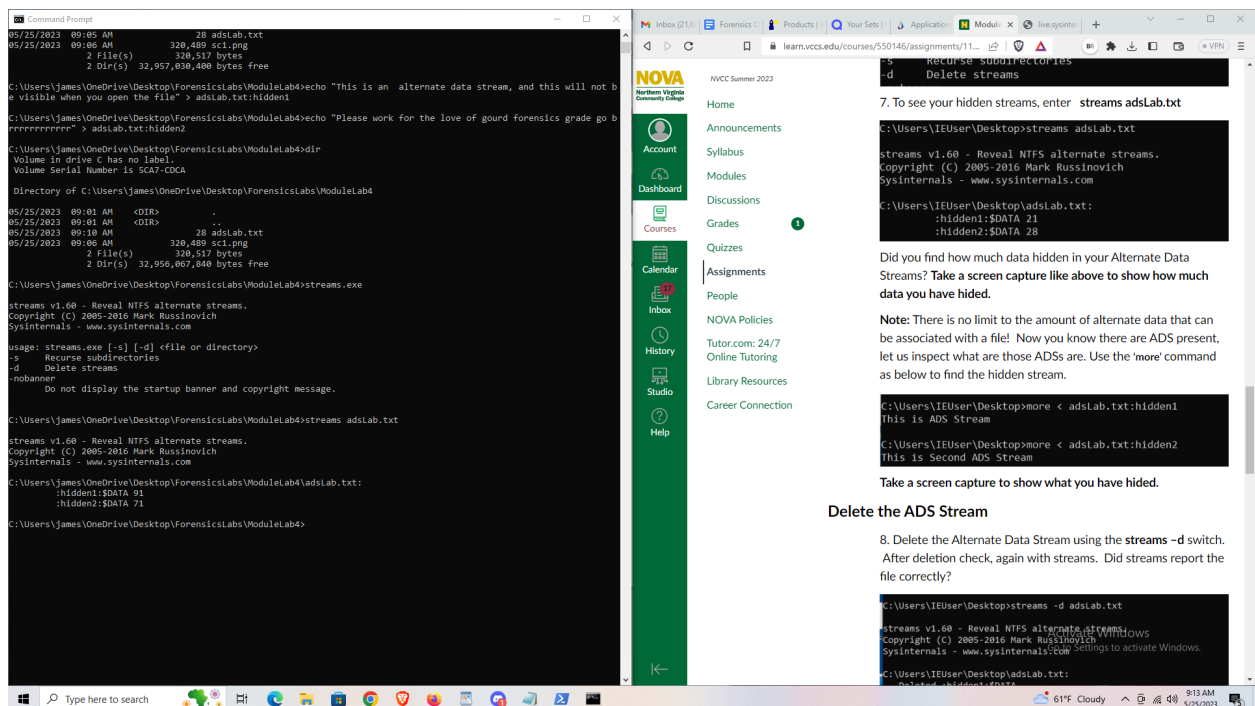
Open the adsLab.txt in CLI (make sure your current working directory is Desktop) and create an ADS named hidden1 using echo command

```
echo "This is an alternate data stream, an
```

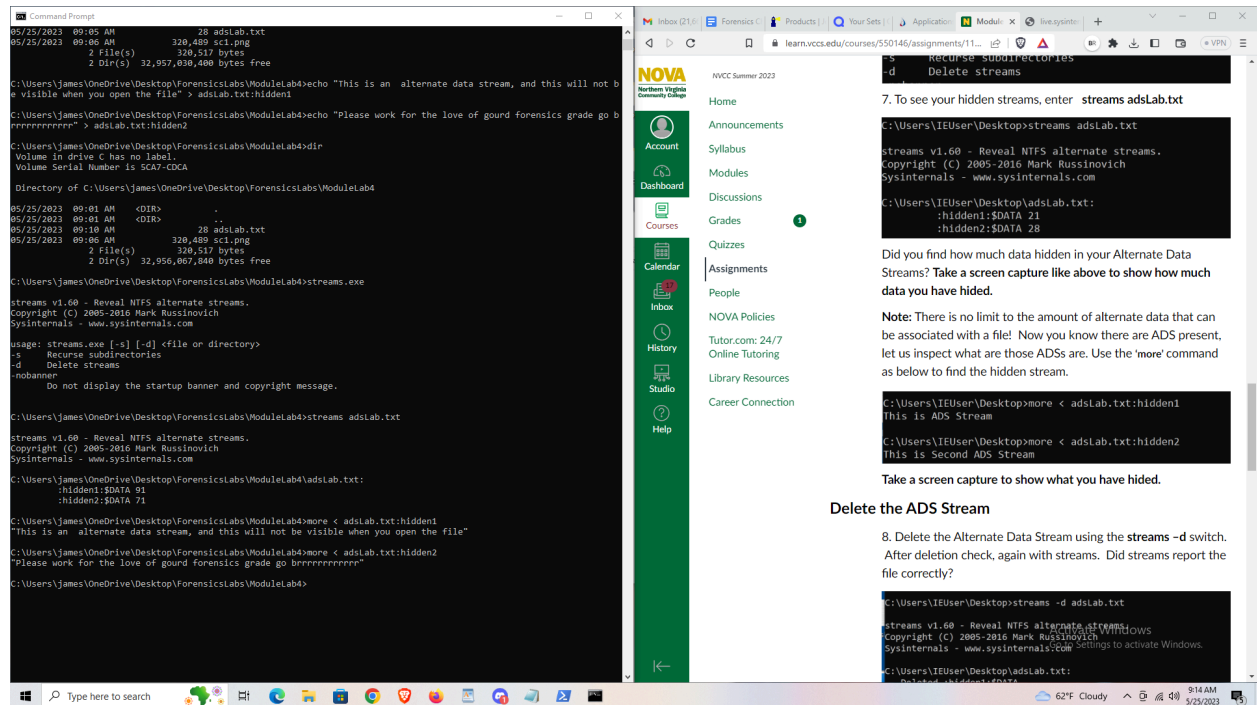
## Screen Capture 2:



## Screen Capture 3:



Screen Capture 4:



Screen Capture 5:

3 Files in total, sizes of 39, 36, and 266. File3.txt = 39, File2.txt = 36, File1.txt = 266

I did everything in the lab as stated and no ADS were found.

