EXPERIMENT-09

Aim :

To study the steps for hiding and extract any text file behind an image file/ Audio file using Command Prompt.

Procedure :

Any file like .rar .jpg .txt or any file can be merged inside another file. In a simple way, we shall learn how to hide a text file inside an image file using the Command Prompt.

How to Hide the FILE?

Suppose you have to hide a text file "A.txt" with the image file "B.jpg" and combine them in a new file as "C.jpg".Where "C.jpg" is our output file which contains the text hidden in the image file.

Follow the steps:

- Copy the file,u need to hide, to desktop(for our tutorial let us assume the file to be "A.txt")
- Copy the image, within which you need to hide the file, to desktop (let it be "B.jpg")
- Now open the cmd:
- **>ctrl+r**
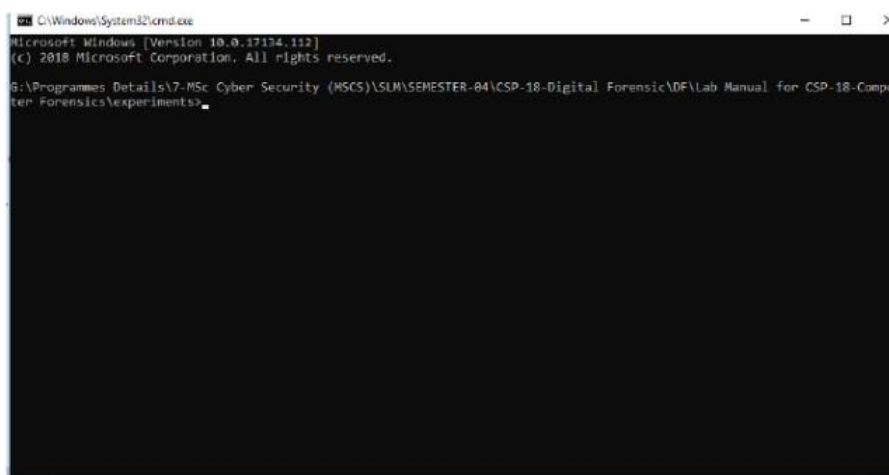
In cmd first type the code as follows:

```
G:\Programmes Details\7-MSc Cyber Security (MSCS)\SLM\SEMESTER-04\CSP-18-Digital Forensic\DF\Lab Manual for CSP-18-Co
ter Forensics\experiments>copy /b B.jpg + A.txt  C.jpg
```

- **>cd desktop**
- NOTE: this code is for assigning the location on cmd to desktop

 Now type the following code:

- **copy /b B.jpg + A.txt C.jpg**


```
G:\Programmes Details\7-MSc Cyber Security (MSCS)\SLM\SEMESTER-04\CSP-18-Digital Forensic\DF\Lab Manual fo
ter Forensics\experiments>copy /b B.jpg + A.txt  C.jpg
B.jpg
A.txt
        1 file(s) copied.

G:\Programmes Details\7-MSc Cyber Security (MSCS)\SLM\SEMESTER-04\CSP-18-Digital Forensic\DF\Lab Manual fo
ter Forensics\experiments>
```

Syntax: copy /b Name-of-file-containing-text-you-want-to-hide.txt + Name-of-initial-image.jpg Resulting-image-name.jpg
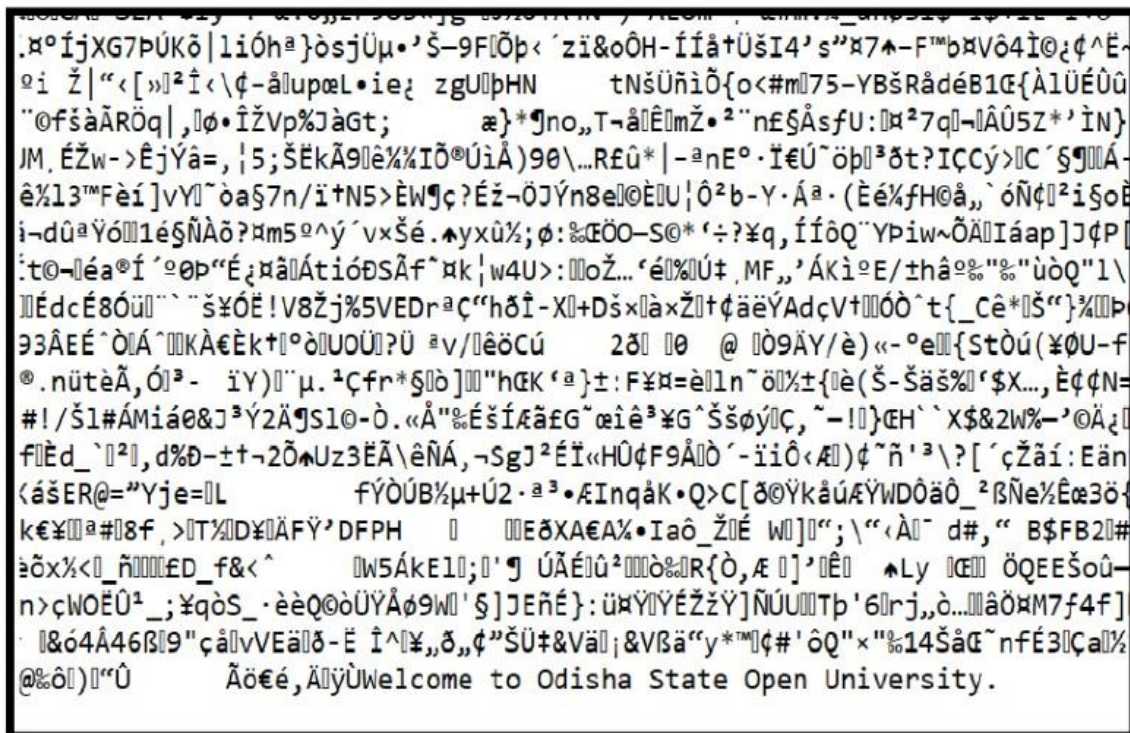
"C.jpg" is the output image inside this out image our file is hidden

How to retrieve the file?

1. locate C.jpg file from where you want to retrieve text data
2. Right-click and open with notepad

Done! Successfully opened! In the last of the notepad, you'll find the content of the text file

The image above shows encoded/binary data with readable text at the bottom: "Welcome to Odisha State Open University."

Hide A Message Into Image:

- Open Run command window by pressing win + r.
- Open command prompt by typing cmd and press OK
- Enter the directory where you have your files.
- Then type the command :echo "Your Message">>"image.jpg"
- Now the message is successfully hidden in the image file.
- To view the message: Open with Notepad, at last, you'll find the Your Message
- echo "Your Message">>"image.jpg"
- Now the message is successfully hidden in the image file.

To view the message:

Open with Notepad, at last, you'll find the Your Message

Another Method

1. Open Run command window by pressing win + r.
2. Open command prompt by typing cmd and press OK
3. Enter the directory where you have your files.
4. Then type the command

Here a.rar is the file to hide behind the image file (b.jpg) and the output file is c.jpg.
To view the RAR file: right-click on the output image (here, c.jpg) and open with
WinRAR. You'll find the file inside the image.

Hide File and text behind Audio File

Firstly get hold of a sound file you want to hide the data in (example sound.mp3), then
gather all your files you want to hide and put them in a ZIP (example secret.zip).
Our chosen Sound and zip file:

secret.zip   sound.mp3

Windows 7/10: Shift+right click in the folder containing the files will open the command prompt in that directory Windows: Open command prompt (start->run cmd), then use cd to get to the folder where the files are stored.
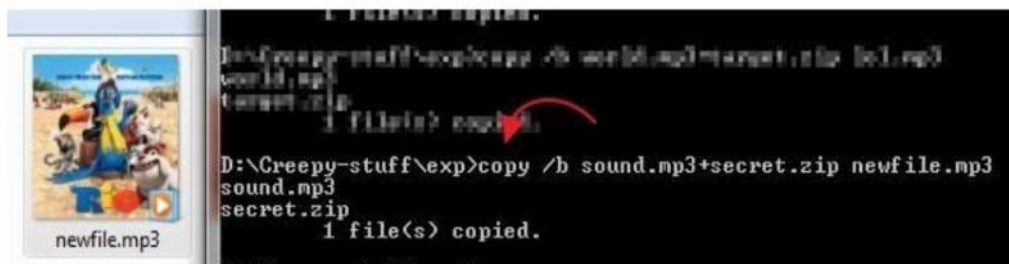
Linux:

We now need to merge these files together, but we want to use a binary merge to keep the two files intact. With Windows copy command this uses the /B switch.
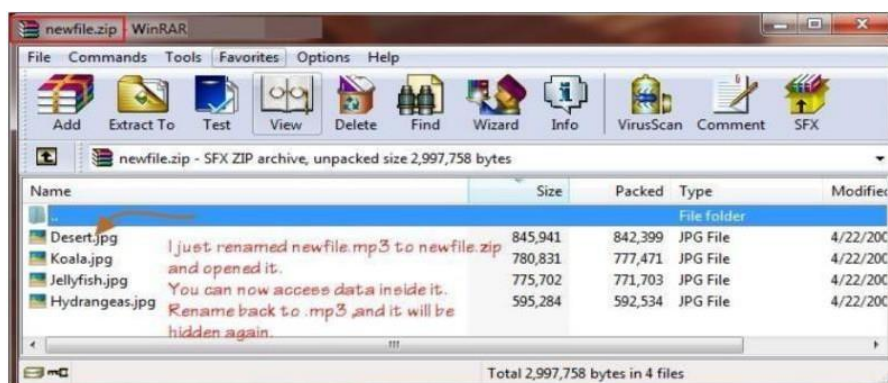
Linux Code:

```
copy /b secret.zip + sound.mp3 newfile.mp3
cat sound.mp3 secret.zip > newfile.mp3
```

Here is the example sound containing a ZIP:

The two simplest ways to get your data back out of these files is to either change the extension from .mp3 to .zip or to open your chosen ZIP program and open newfile.mp3 within that. You should now be presented with your original files.

Result:

> Thus, the forensic tools executed successfully, and the evidence was captured and analyzed accurately.