

## **Aim: Using Steganography tools [S-Tools].**

**Step 1: Select the S-Tools.exe file and open the steganography software tool.**

- S-Tools Window Open

**Step 2:** With both the working directory and the S-Tools program open minimize both windows and place side-by-side. The S-Tools program is a drag and drop software. The files used to create the steganography file can be dragged from the directory into the S-Tools program.

**Step 3:** If your image is in .jpg format, convert it to .bmp format by doing the following steps

- Open the Selected Image With Paint and Save image in BMP format

**Step 4:** The keyhole-final-1.bmp was selected and dragged onto the main window of the S-Tools program.

- **The image is opened.**

**Step 5:** Select a file to hide within the base file. If it's not there, create a txt.

- **Save the file**

**Step 6:** The code.txt was selected and dragged onto the main window of the S-Tools program.

- After Dragged code.txt file onto main window of the S-Tools A dialogue box will appear asking the user to enter and verify a passphrase. Additionally, the user will have to select an encryption algorithm.
- Enter a **passphrase** in both the **passphrase** and **verify passphrase text boxes**. And **Click on OK**

**Step 7:** The S-Tools main window will appear and a new file will be visible. The name of the file will be called **hidden data by default**.

**Step 8:** Place the cursor on top of the hidden data image and select the right mouse button. The user will have four options available to them

- Save
- Save As
- Properties
- Reveal

**Step 9:** Selecting the 'Properties' button while the cursor is over any image will display the following

- Width and Height of the image
- Bits per pixel
- Memory Usage (file size in bytes)
- Compression

**Step 10:** Selecting the '**Reveal**' button will display a passphrase dialogue box. A passphrase must be entered twice in the dialogue box and the correct encryption algorithm must be selected.

- Enter a passphrase twice, select the encryption algorithm, and **select the 'OK'** button.
- A 'Revealed Archive' dialogue box will display which contains the file name and size of the hidden file.

**Step 11: Select the Save as**

- A 'Save As' dialogue box will appear. Enter a valid file name, select the working directory and select the 'Save' button

**Step 12:** Locate the files in the working directory.

- Open the files using a multimedia software program and ensure that the files were extracted from the steganography file successfully.