

## **Day 59**

### **Topic: Steganography**

**Objective:** To hide secret data within innocent-looking files (images/audio).

#### **Theoretical Concepts:**

Steganography is the art of hiding the \*existence\* of the message. We discussed LSB (Least Significant Bit) modification techniques.

#### **Practical Work:**

We used **Steghide** to embed a secret text file inside a JPEG image. Command: *steghide embed -cf image.jpg -ef secret.txt*. The resulting image looked identical to the original. We then used the extract command with a passphrase to retrieve the hidden data. We also looked at Stegsolve to analyze image layers.

**Tools Used:** Steghide.

**Outcome:** Understanding how data can be exfiltrated covertly using media files.