Indian Institute of Technology Jodhpur Computer Science and Engineering Department Lab 6

CSL6010 - Cyber Security

Date 16.03.2023 Marks: 10

Aim: Understanding OpenStago

Late submission penalty: 1 mark per day

Plagiarism: Do not do it. Write little but by yourself.

Lab description: This lab is intended to familiarize you with a popular open-source steganography tool, OpenStago. It provides two functionalities: Data hiding and Watermarking. Please download and install it if you have not done so already.

<u>Submission instructions:</u> This is an individual assignment. You must do it yourself. You must submit a report (not handwritten) in PDF format containing your observations for each task. Please attach relevant screenshots. The name of the file should be in the following format; <your_id>_lab6.pdf

Task:

- 1. Encrypt the .txt file into the .png file (You can download any image from google) and save it inside a folder.
- 2. Password protect your file with a password of your choice.
- 3. Confirm the functionality of the Steganography.
 - a. First hide the data inside an image using OpenStago
 - b. Second, extract the data from the encrypted image using OpenStago. Check if you are getting the same .txt file or not?
- 4. Perform watermarking as well using OpenStago
 - a. First you need to generate the signature file
 - b. Then embed the watermark
 - c. At last verify the watermark.