

Homework #6: Forensics

Assignment Details

This homework is due by Saturday, March 12th at **1:00 PM** ET. Remember there are no late submissions for the homework so please complete it by then.

For this assignment, be sure to document your process, don't just give the answers! Write as if you were explaining to yourself before you figured it out.

Please add the following header to your assignment:

Name: {Firstname Lastname}

UID: {Your UID}

Honor Pledge: *I pledge on my honor that I have not given or received any unauthorized assistance on this assignment/examination.*

Assignment Goal: Apply the techniques and terminologies covered in Lecture #6 to apply basic forensic analysis techniques

Assignment Questions

- **Question 1 (25 points): Steganography**

1. Rick Astley sent me this mastered copy of his famed song "Never Gonna Give You Up" and told me there was a secret message in it. Can you find it for me? (hint: there's no password, just hit enter)
2. I've been playing around with LSB steganography lately. I used this site to do something to this image. Can you find my secret message?



- **Question 2 (25 points): File Integrity**

1. There are 3 files here, two of them are the same and one of them is different. Find the two that are the same and supply their md5 and sha256 hashes.

- File 1
- File 2
- File 3

- **Question 3 (25 points): Disk recovery**

1. A masked K1tt3nG4ng member broke in and smashed my flash drive! Vanya managed to recover the flash contents, but can you get my files back? The contents are available here.

- Verify you downloaded the .img correctly! The sha256 hash is
`06d8da8d8950ce84e0805abc75217411897dd413b6d0b66674768c68720ca9cf`
- Can you find the flag? (Hint: you will need to `mount`)

Scoring

This homework is going to be out of 100 points.

Point Breakdown:

- 75 points: problem answers

- 25 points: write-up formatting

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