Review: Quiz 06 – Steganography (Digital Forensics 152361)

✓ **Correct** 0.5/0.5 Points

0.5   / 0.5 pts
Auto-graded

1. What term describes a cryptographic technique used to embed information within something else to hide it from the casual observer? *

- ◯ rootkit

- ◯ key escrow

- ⦿ steganography ✓

- ◯ offset

✓ **Correct** 0.5/0.5 Points

0.5   / 0.5 pts
Auto-graded

2. Which of the following is considered an anti-forensics technique? (Choose all that apply) *

- ☐ Data deduplication

- ☑ Steganography ✓

- ☑ Encryption ✓

- ☑ Password protection ✓

✓ **Correct** 0.5/0.5 Points

0.5   / 0.5 pts
Auto-graded

3. During a confession, an accused criminal admitted to encrypting child pornography images and hiding them within other images. What technique did the accused employ? *

- ◯ Typography

- ◯ Steganalysis

- ◯ Picture encoding

- ⦿ Steganography ✓

4. Which of the following commands allows you to hide a secret_file within an image_file? (Choose all that apply) *

- ☑ steghide embed -ef <secret_file> -cf <image_file> -p <password> ✓

- ☐ steghide extract -sf <image_file> -xf <secret_file> -p <password>

- ☑ jphide <image_file> <out_image_file> <secret_file> ✓

- ☐ jpseek <secret_file> <image_file>

5. Which tool(s) allow you to **retrieve the password** used by Steghide to hide files in images? (Choose all that apply) *

- ☐ stegdetect

- ☑ stegcracker ✓

- ☑ stegseek ✓

- ☐ jpdetect

- ☐ jpseek

- ☐ steghide

6. Which of the following tools allows you to hide files in MP3 files? *

- ☐ jphide

- ☐ steghide

- ☑ audiostego ✓

- ☑ mp3stego ✓

- ☐ openstego

7. In task 4, when using **3 bits** in the TTL field of the IP header to hide data, how many different TTL values can the decoding server receive? *

   ○ 2

   ○ 4

   ◉ 8 ✓

   ○ 32

8. Which filter in Wireshark allows for filtering ICMP Echo Reply packets? (Choose all that apply) *

   ☐ icmp.type == 8

   ☑ icmp.type == 0 ✓

   ☐ icmp.code == 0

   ☐ icmp.code == 8

   ☐ icmp.type == "8"

   ☐ icmp.type == "0"

9. What string is used as the **key** by the JPHide tool to hide the secret data in the image file in the challenge for Task 2? *

   > bananamilkshake

10. What is the message hidden in the TTL field in the challenge for Task 4? *

    > DF2024

11. What is the content of the file encoded and transmitted in the challenge for Task 5 using the **Inter-arrival Time pattern**? *

    > secret

0.5   / 0.5 pts
Auto-graded

12. Which of the following extensions indicate an graphic file? (Choose all that apply) *

- ☑ .jpg ✓

- ☑ .png ✓

- ☐ .mp3

- ☑ .bmp ✓

- ☑ .gif ✓

0.5   / 0.5 pts
Auto-graded

13. In which of the following cases is the use of steganography considered a crime? *

- ☐ Embedding File Ownership Marking Data

- ☑ Embedding Stolen Sensitive Data in Files ✓

- ☑ Embedding Malicious Executables in Files ✓