CHALLENGE NAME : MYSTERY OF OAKVILLE TOWN

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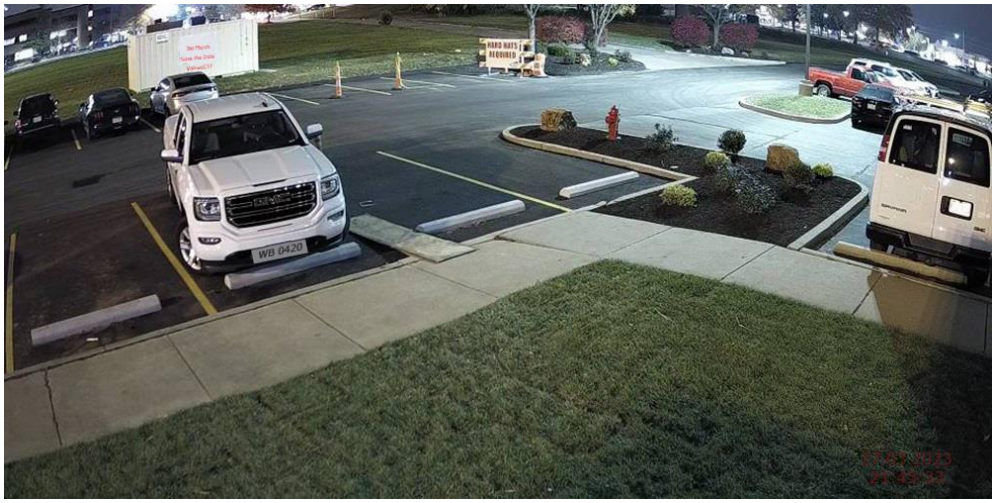
CATEGORY : DIGITAL FORENSICS

LEVEL : MEDIUM

Challenge Description :

On March 27, 2023, a golden sceptre was taken from Oakville Town Hall. Suspect Johannes Trithemius has been taken into custody by Detective Jameson. Jameson believes he is the town's fugitive thief's right-hand man. Jameson was able to retrieve one image that he thinks contains details about the vehicle the thief fled in, even though Johannes had erased all digital traces from the device. There are four intertown highways in Oakville, and they are constantly closely watched. The database contains all the data on the roads as well as the data on the residents of the towns. Find the thief and town name he escaped to. Watch out for Johannes, a cunning con artist who frequently knows how to trick the police. Flagformat VishwaCTF{FirstNameLastNameTown}

Solution:



1. The image looks pretty normal but if you look carefully to the bottom right corner the date and time
   
2. It is the date of the incident so maybe the time is the time of incident and password?
   27 03 2023
   21:45:33
3. The message is embedded in the image using steghide.
4. So, using the steghide command and giving time as the passphrase. (214533)

5.
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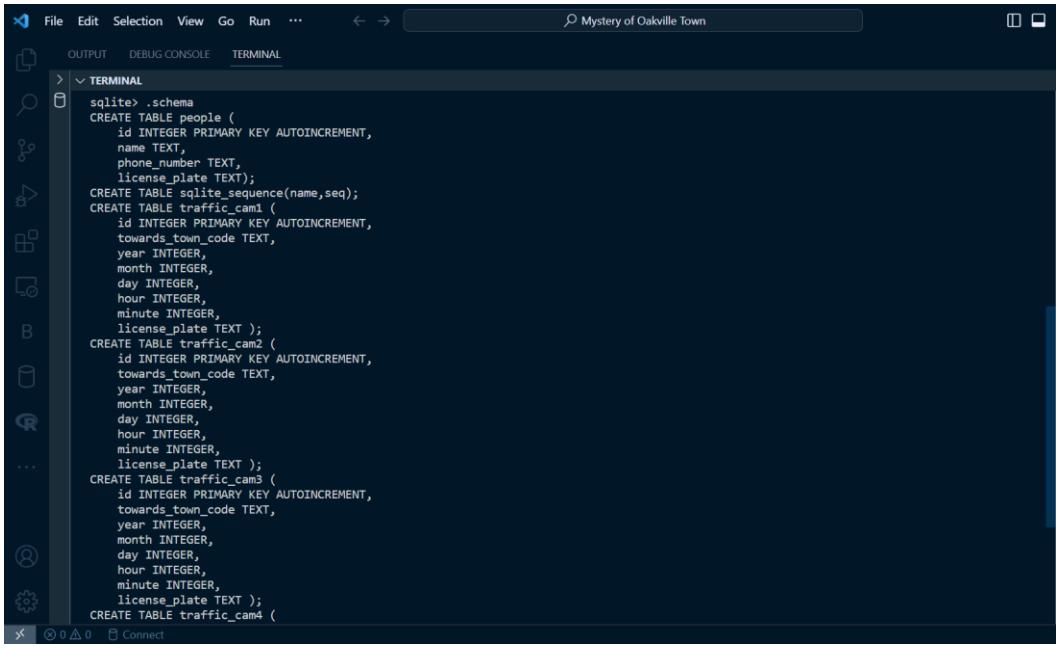
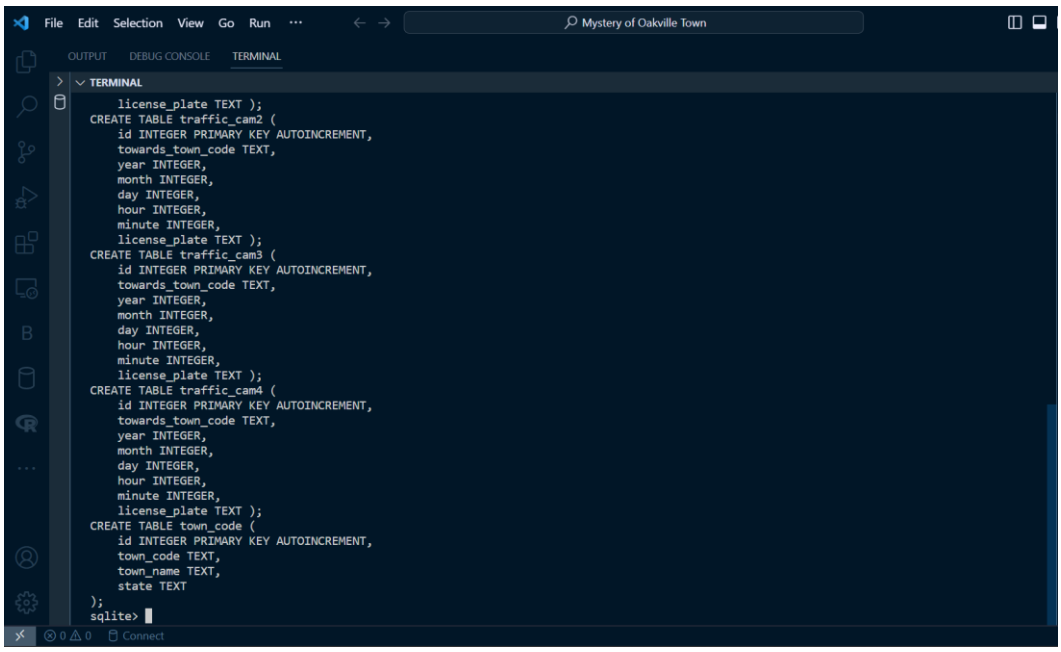
┌──(naziya㉿kali)-[~/CTF_Q/Mystery of Oakville Town]
└─$ steghide extract -sf Image.jpg
Enter passphrase:
the file "message.txt" does already exist. overwrite ? (y/n) y
wrote extracted data to "message.txt".

┌──(naziya㉿kali)-[~/CTF_Q/Mystery of Oakville Town]
└─$ cat message.txt
Meet me in OV-007
```
6. The message “Meet me in OV-007”
7. So the thief’s escape car is “OV-007”.
8. Now if we look into the schema of database we get 6 tables described bellow





9. Using the commands below we extract the culprits name and the town he escaped to.
    a) SELECT * FROM people WHERE license_plate = "OV-007";
    Output: 838|Wellington East|139-403-1197|OV-007
    b) SELECT * FROM traffic_cam3 WHERE license_plate = "OV-007" and year=2023 and month = 3 and day = 27 and hour=21 and minute=45;

Output: 715|SW|2023|3|27|21|45|OV-007

c) SELECT * FROM town_code WHERE town_code="SW";
Output: 10|SW|Springwood|Cryptonia

Flag: VishwaCTF{WellingtonEastSpringwood}