

Conducting Forensic Investigations on Mobile Devices (4e)

Digital Forensics, Investigation, and Response, Fourth Edition - Lab 08

Student:

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Time on Task:

1 hour, 35 minutes

Progress:

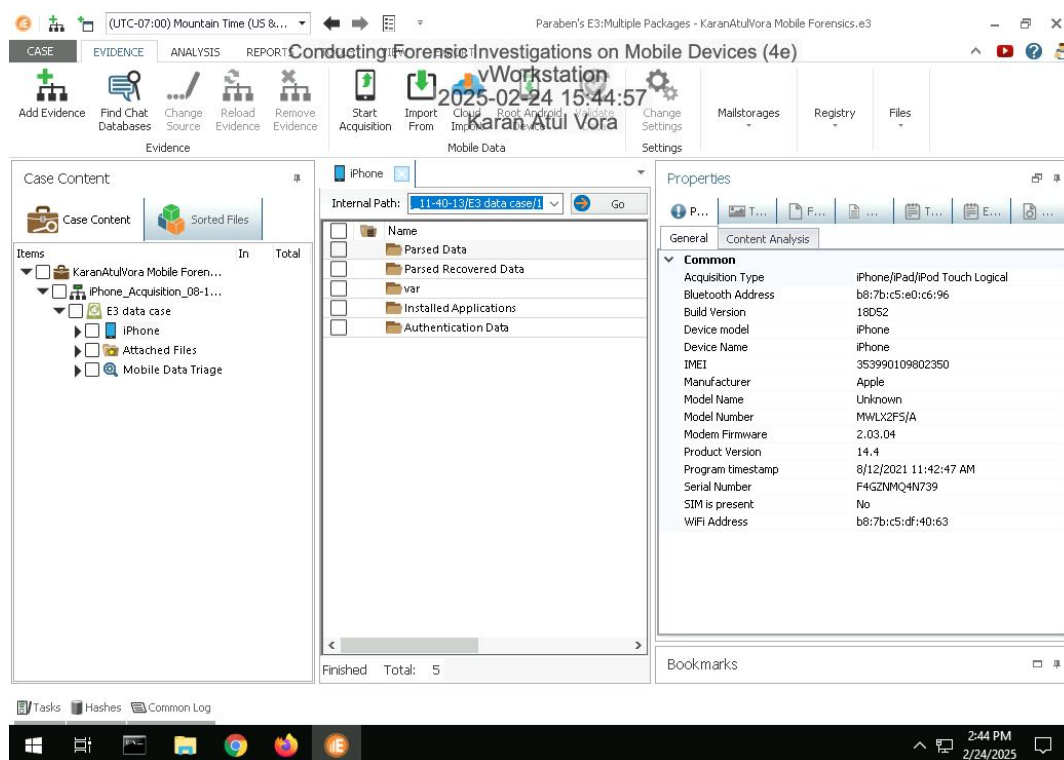
100%

Report Generated: Monday, February 24, 2025 at 6:16 PM

Section 1: Hands-On Demonstration

Part 1: Identify Forensic Evidence in an iOS Data Case

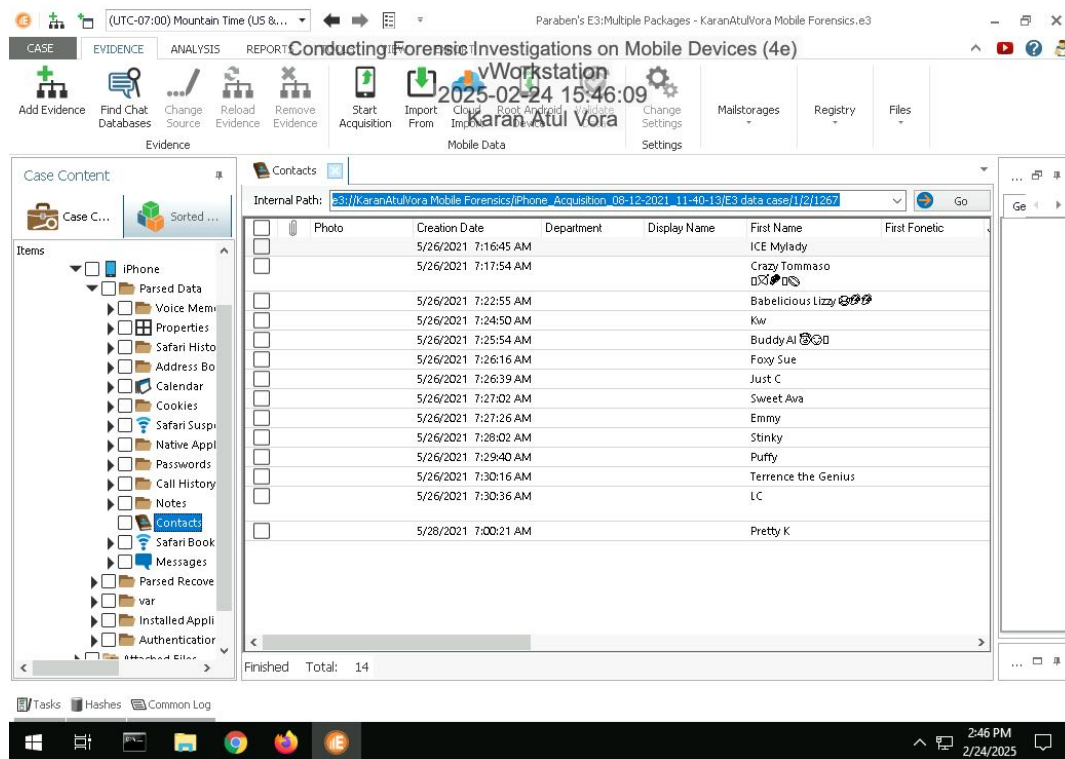
8. Make a screen capture showing the contents of the Properties pane.



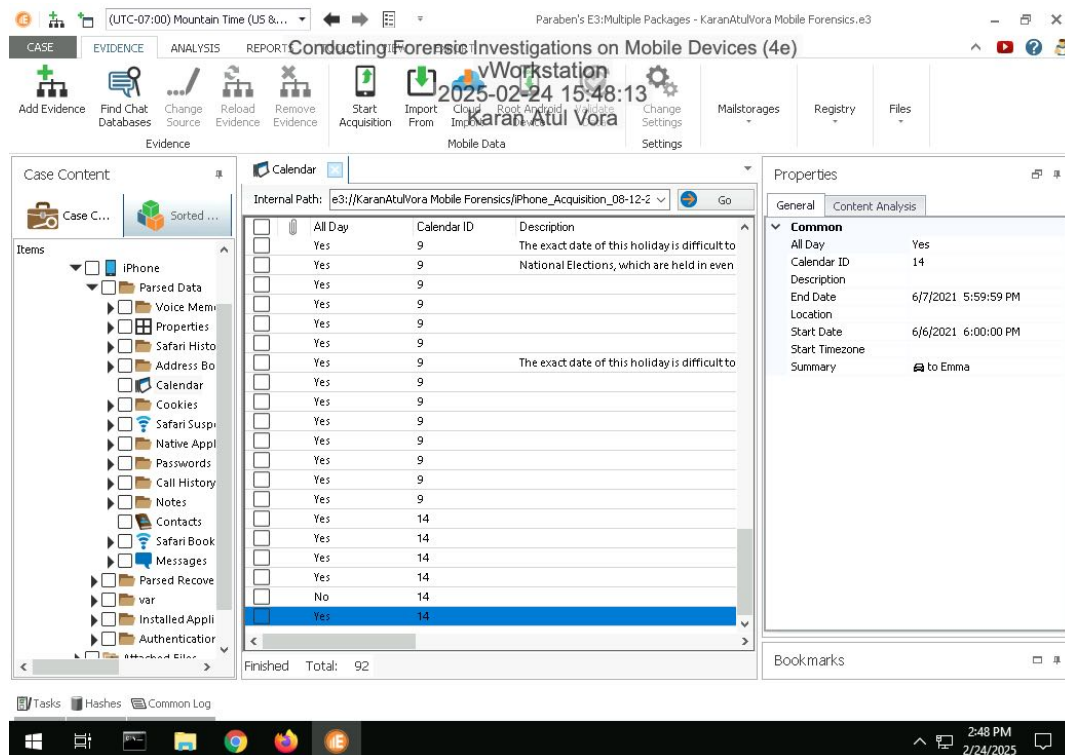
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11. **Make a screen capture** showing the **contents of the Contacts grid**.



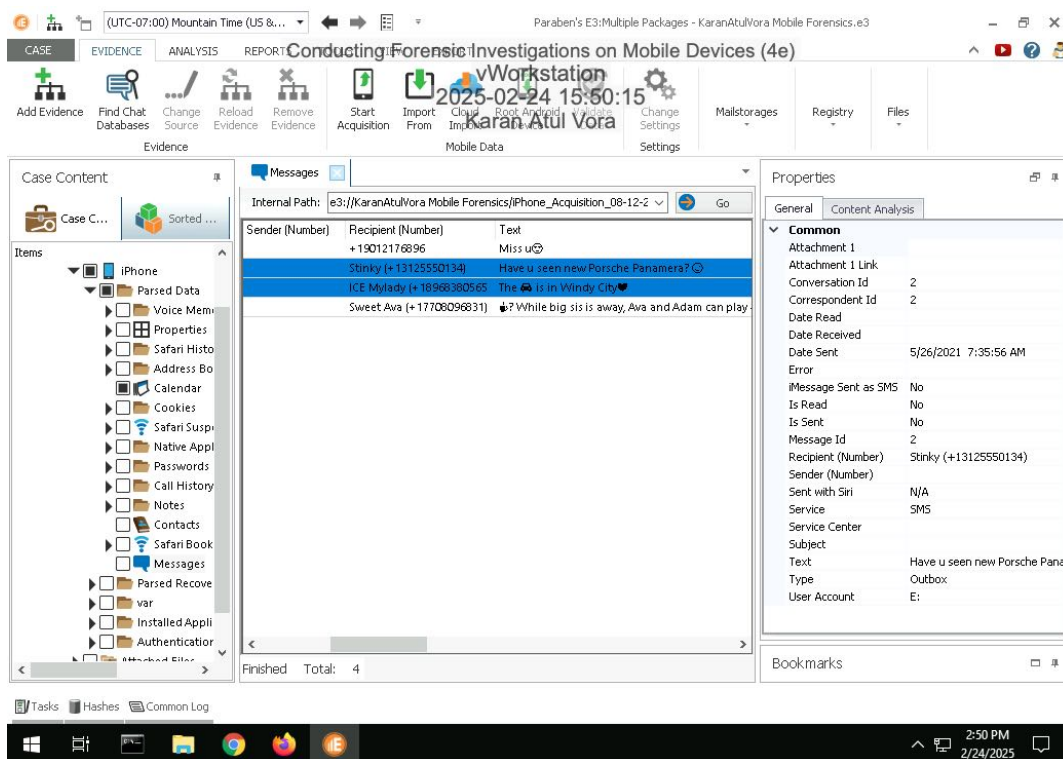
14. **Make a screen capture** showing the **contents of the Calendar grid**.



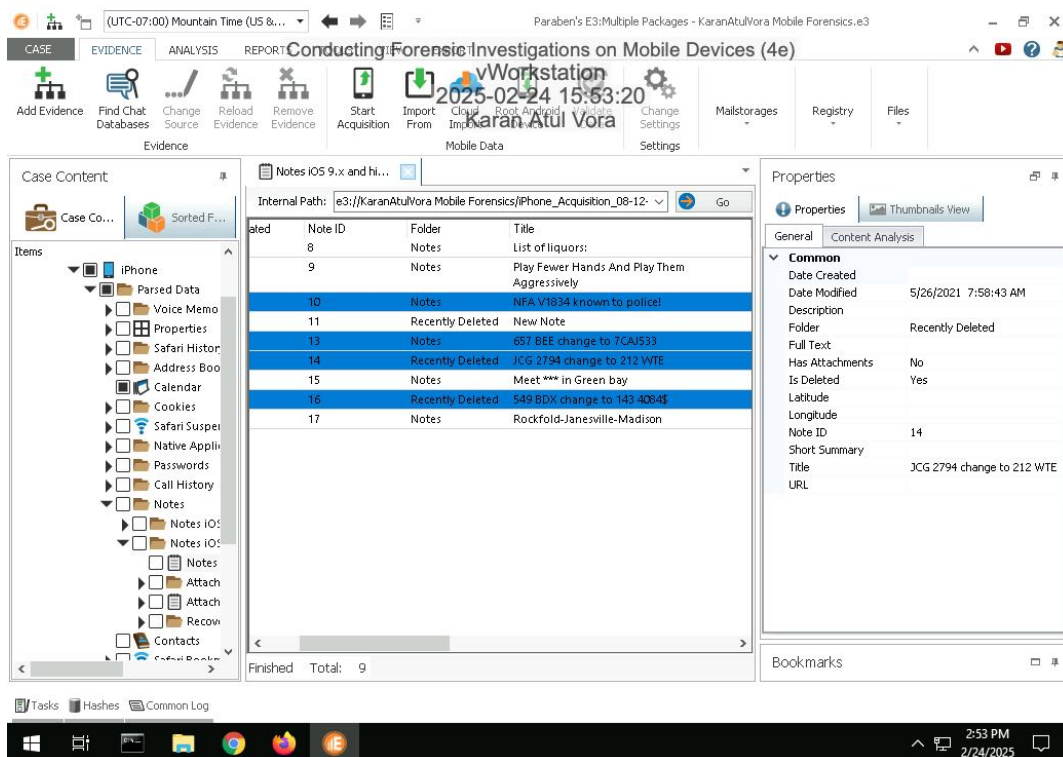
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20. Make a screen capture showing the contents of the Messages grid.



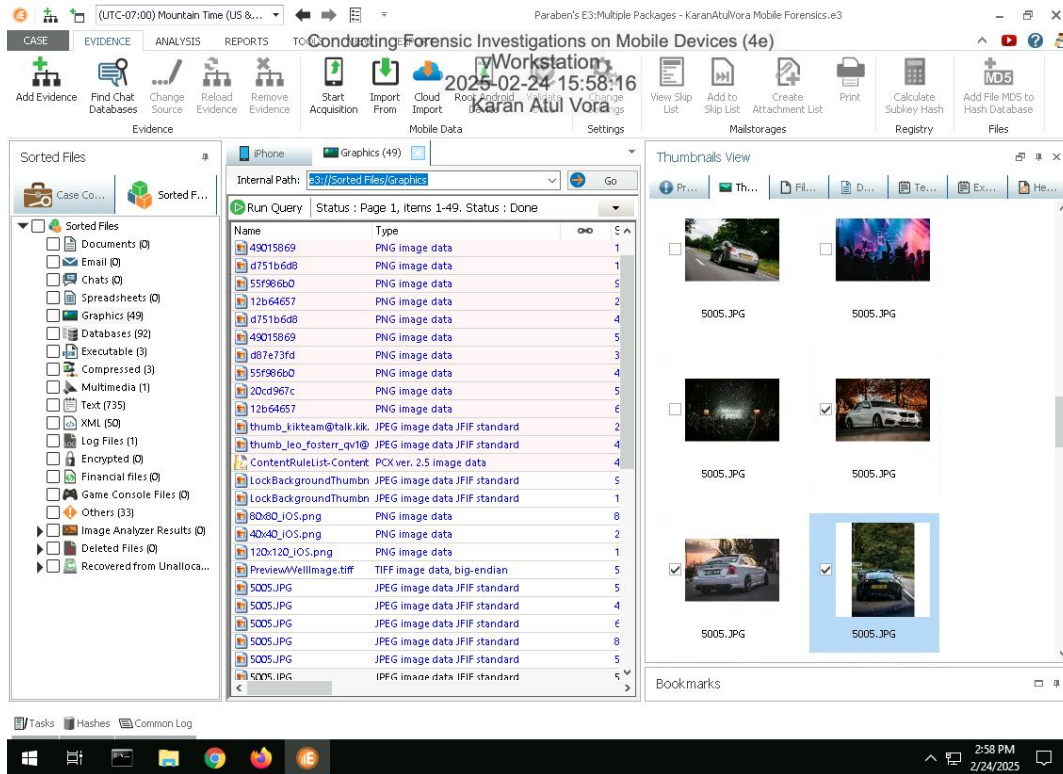
24. Make a screen capture showing the contents of the Notes grid.



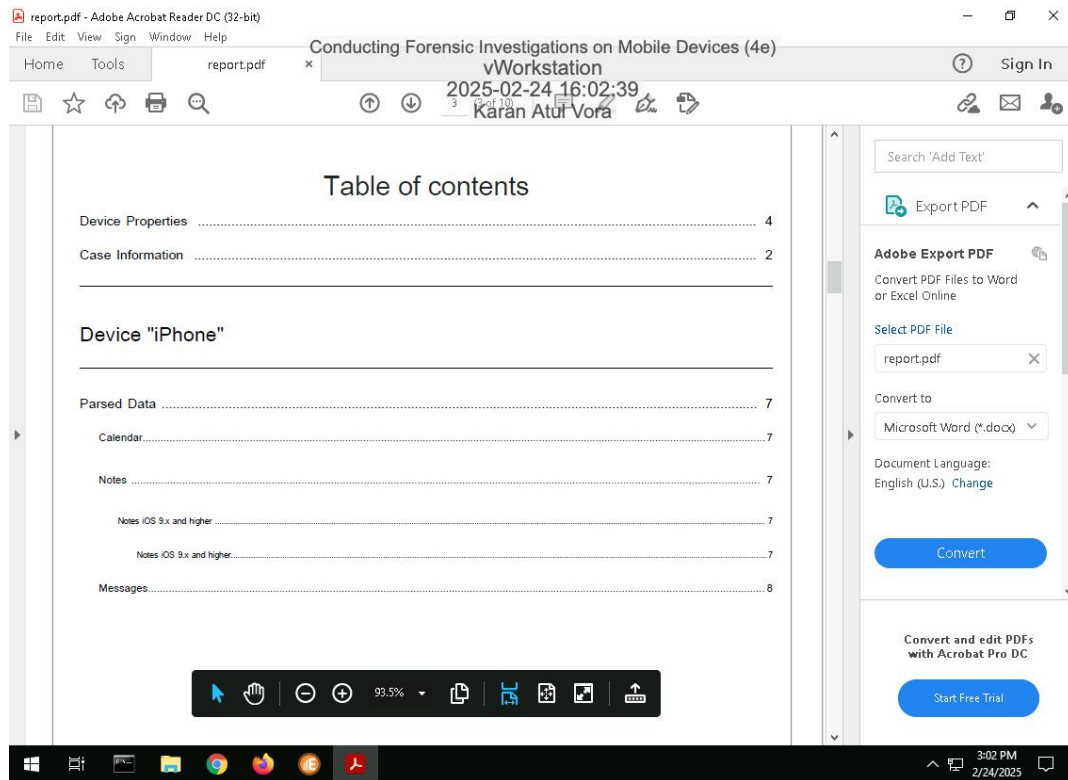
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34. Make a screen capture showing at least two car pictures in the Thumbnail View.



44. Make a screen capture showing the **Table of contents** in the investigative report.

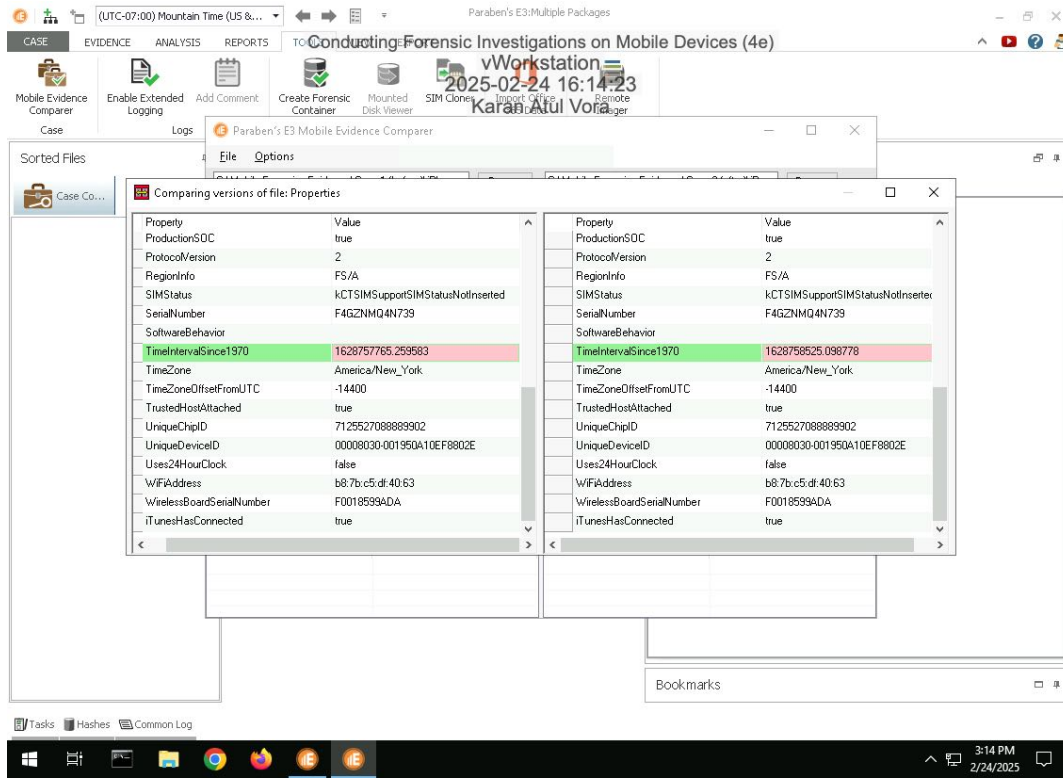


Part 2: Compare iOS Data Cases

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10. Make a screen capture showing the difference in data case properties.



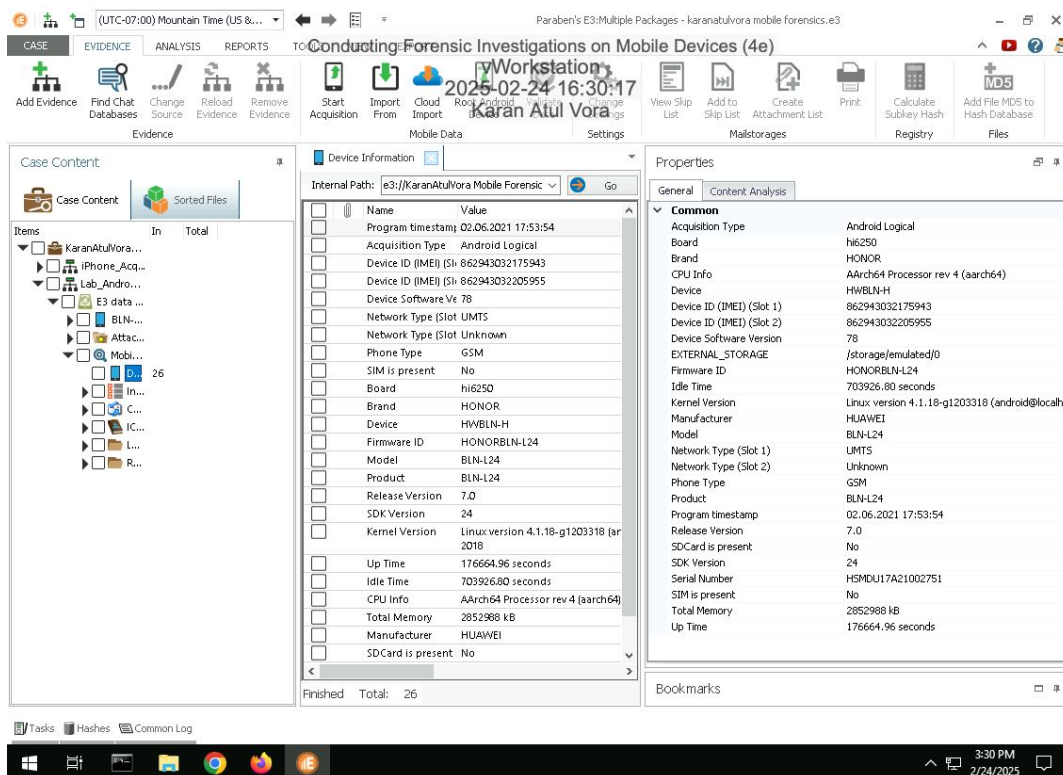
15. Make a screen capture showing the additional note in the newer data case.



Section 2: Applied Learning

Part 1: Identify Forensic Evidence in Android User Data

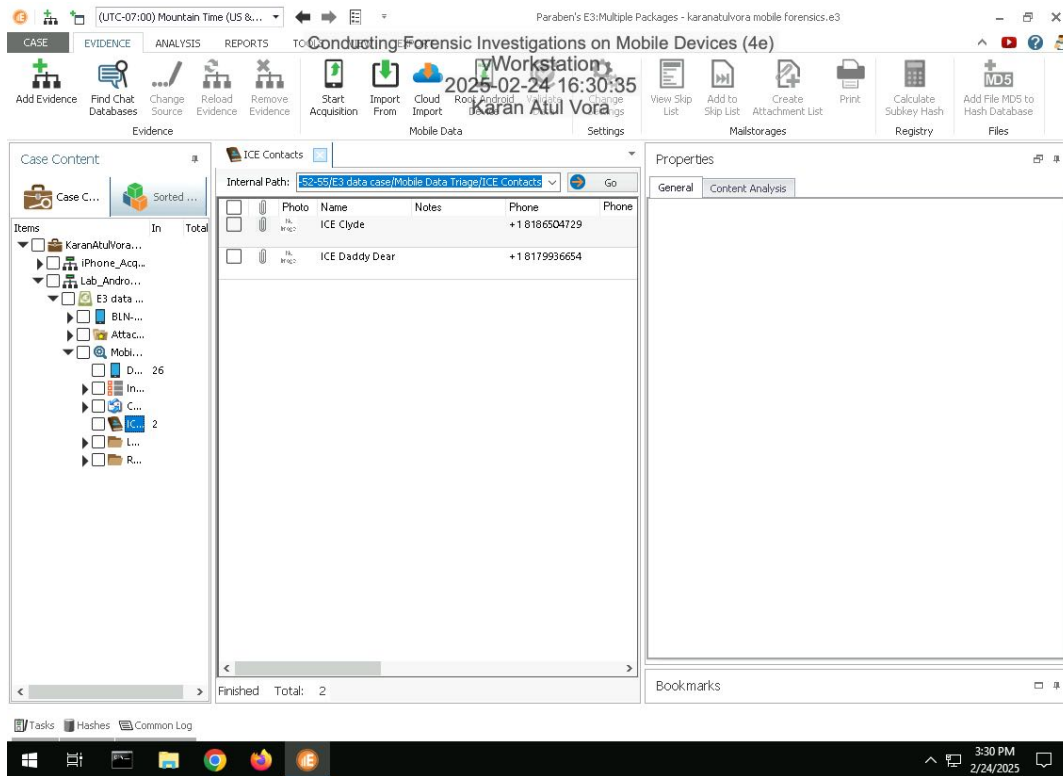
7. Make a screen capture showing the Device Information.



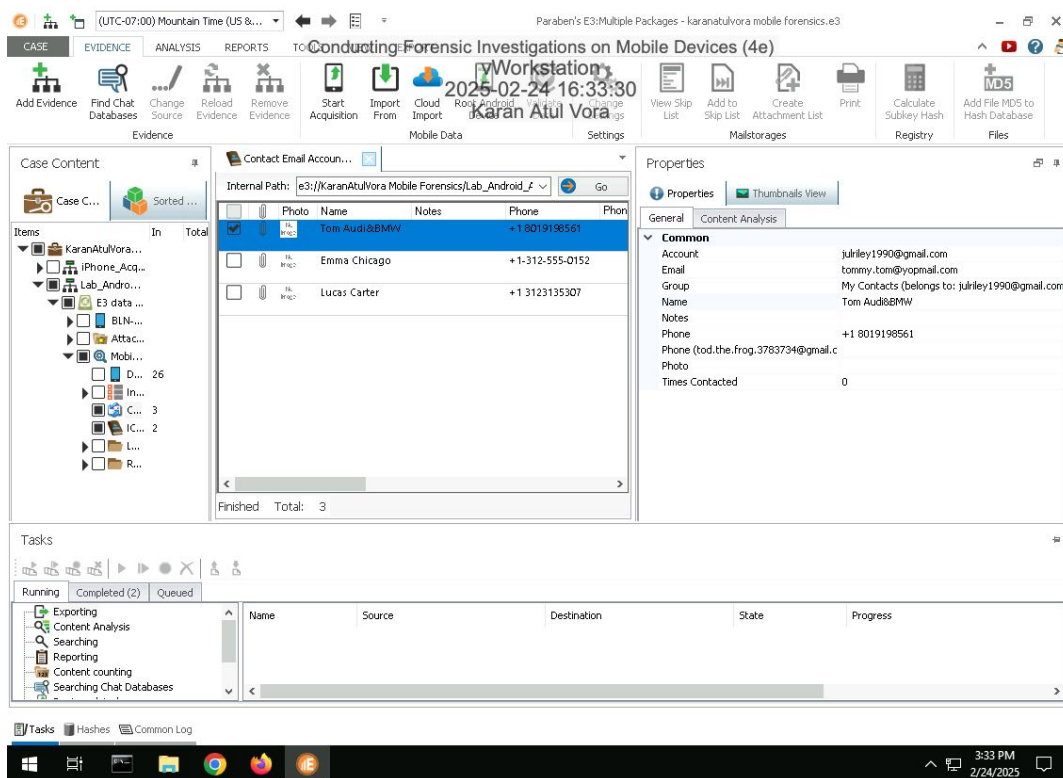
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9. Make a screen capture showing the ICE Contacts.



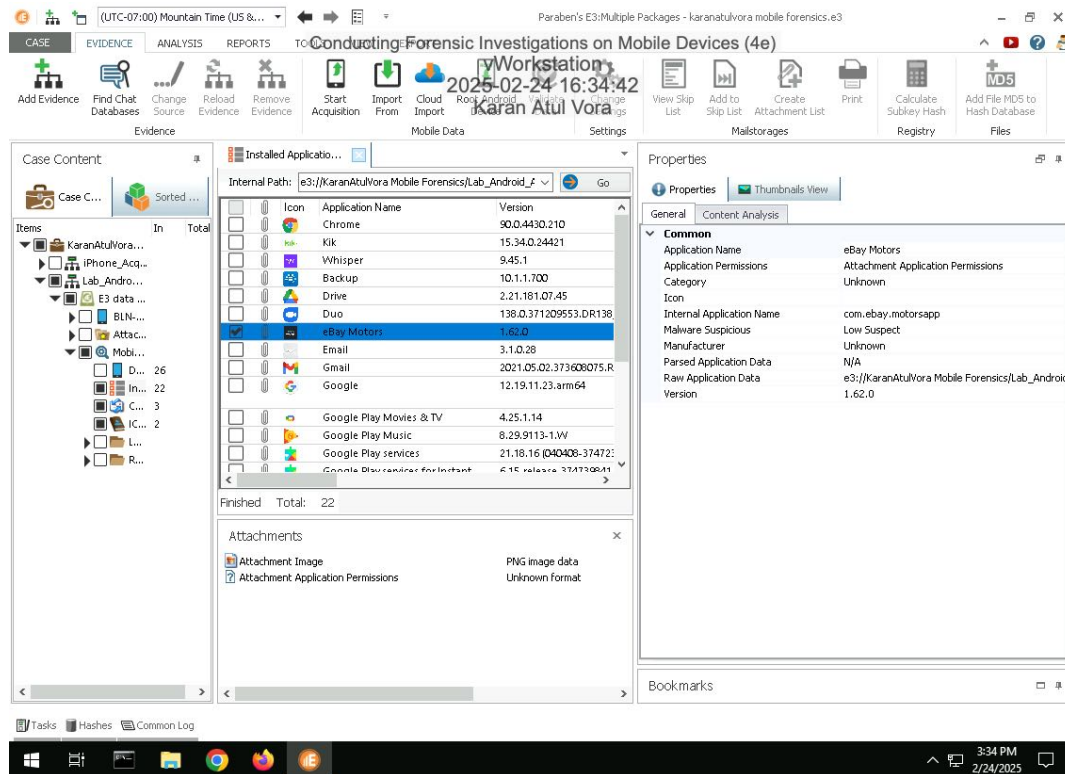
12. Make a screen capture showing the Contact Email Accounts.



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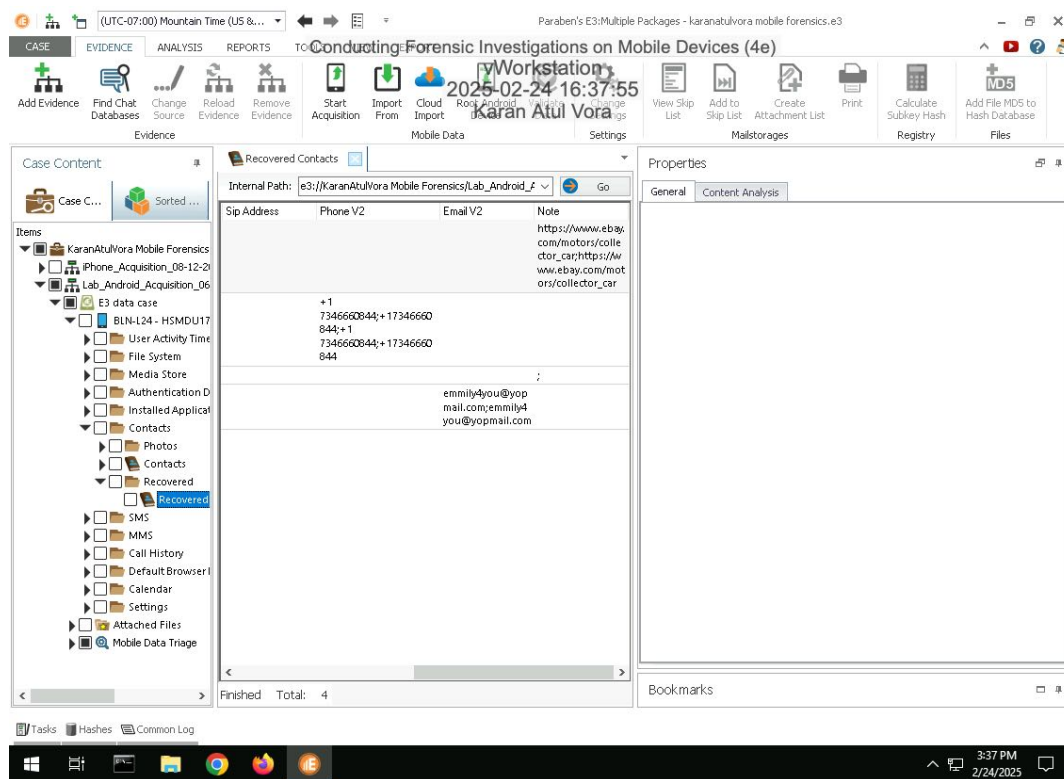
15. Make a screen capture showing the Installed Applications.



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19. **Make a screen capture** showing the **recovered contact information** from the **Android phone**.



Part 2: Identify Forensic Evidence in Android Application Data

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4. Make a screen capture showing the **User Activity Timeline** between 9:17:47 AM and 9:24:51 AM on 6/2/2021.

The screenshot displays the Paraben's E3 Mobile Forensics software interface. The main window shows the 'User Activity Timeline' for a specific case. The timeline lists various applications and their internal names, along with the time of activity. The 'Properties' pane on the right shows details for the selected application, 'Whisper'.

Case Content

- Case C...
- Sorted...
- KaranAtulVora Mobile Forensics
 - iPhone_Acquisition_08-12-20
 - Lab_Android_Acquisition_06
 - E3 data case
 - BLN-L24 - HSMDDU17
 - User Activity Time
 - File System
 - Media Store
 - Authentication D
 - Installed Applicat
 - Contacts
 - Photos
 - Contacts
 - Recovered
 - Recovered
 - SMS
 - MMS
 - Call History
 - Default Browser
 - Calendar
 - Settings
 - Attached Files
 - Mobile Data Triage

User Activity Timeline

Time	Application Name	Internal Application Name	Internal Ac
6/2/2021 9:18:53 AM	Whisper	sh.whisper	sh.whisper
6/2/2021 9:18:53 AM	System UI	com.android.systemui	com.andr
6/2/2021 9:18:55 AM	System UI	com.android.systemui	com.andr
6/2/2021 9:18:55 AM	Chrome	com.android.chrome	org.chrom
6/2/2021 9:19:13 AM	Chrome	com.android.chrome	org.chrom
6/2/2021 9:19:13 AM	System UI	com.android.systemui	com.andr
6/2/2021 9:19:14 AM	System UI	com.android.systemui	com.andr
6/2/2021 9:19:14 AM	Whisper	sh.whisper	sh.whisper
6/2/2021 9:20:17 AM	Whisper	sh.whisper	sh.whisper
6/2/2021 9:20:17 AM	System UI	com.android.systemui	com.andr
6/2/2021 9:20:18 AM	System UI	com.android.systemui	com.andr
6/2/2021 9:20:18 AM	Chrome	com.android.chrome	org.chrom
6/2/2021 9:20:23 AM	Chrome	com.android.chrome	org.chrom
6/2/2021 9:20:23 AM	System UI	com.android.systemui	com.andr
6/2/2021 9:20:24 AM	System UI	com.android.systemui	com.andr
6/2/2021 9:20:24 AM	Whisper	sh.whisper	sh.whisper
6/2/2021 9:21:06 AM	Whisper	sh.whisper	sh.whisper
6/2/2021 9:21:06 AM	Huawei Home	com.huawei.android.launcher	com.huaw
6/2/2021 9:21:25 AM	VPN Unlimited	com.free.vpn.secure.proxy	com.free
6/2/2021 9:21:34 AM	Huawei Home	com.huawei.android.launcher	com.huaw
6/2/2021 9:21:34 AM	Contacts	com.android.contacts	com.andr
6/2/2021 9:21:38 AM	Contacts	com.android.contacts	com.andr
6/2/2021 9:21:38 AM	Contacts	com.android.contacts	com.andr
6/2/2021 9:21:40 AM	Contacts	com.android.contacts	com.andr
6/2/2021 9:21:40 AM	Contacts	com.android.contacts	com.andr

Properties

General

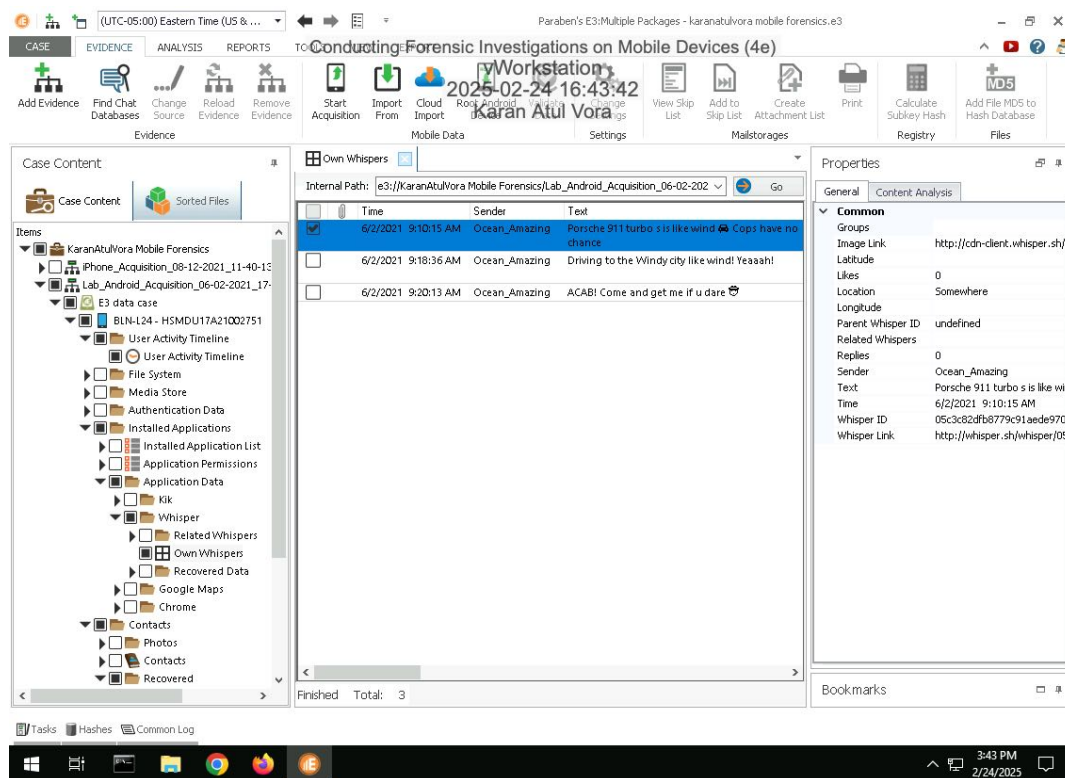
- Application Name: Whisper
- Internal Activity Name: sh.whisper.WMainActivity
- Internal Application Name: sh.whisper
- Time: 6/2/2021 9:17:47 AM
- Type: Move to foreground

Bookmarks

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7. Make a screen capture showing the contents of the Own Whispers grid.



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10. Make a screen capture showing the contents of the History grid.

The screenshot displays the Paraben's E3 Mobile Forensics software interface. The main window is titled "Conducting Forensic Investigations on Mobile Devices (4e)". The interface is divided into several sections:

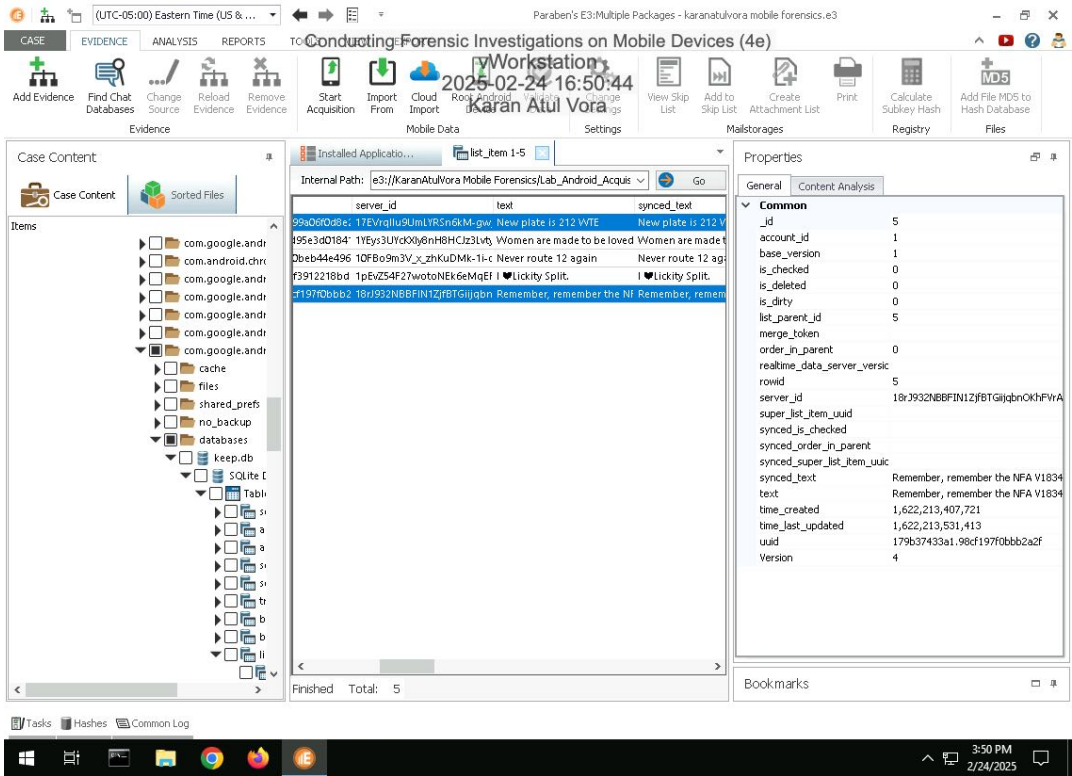
- Case Content:** A tree view on the left showing the case structure, including "KaranAtulVora Mobile Forensics", "iPhone_Acquisition_06-12-2021_11-40-13", "Lab_Android_Acquisition_06-02-2021_17", and "E3 data case".
- History:** A central grid showing a list of visited URLs and their corresponding visit dates. The grid is titled "History" and has columns for "Visit Date" and "URL".
- Properties:** A panel on the right showing details for the selected item, including "Title", "URL", and "Visit Date".

The History grid contains the following data:

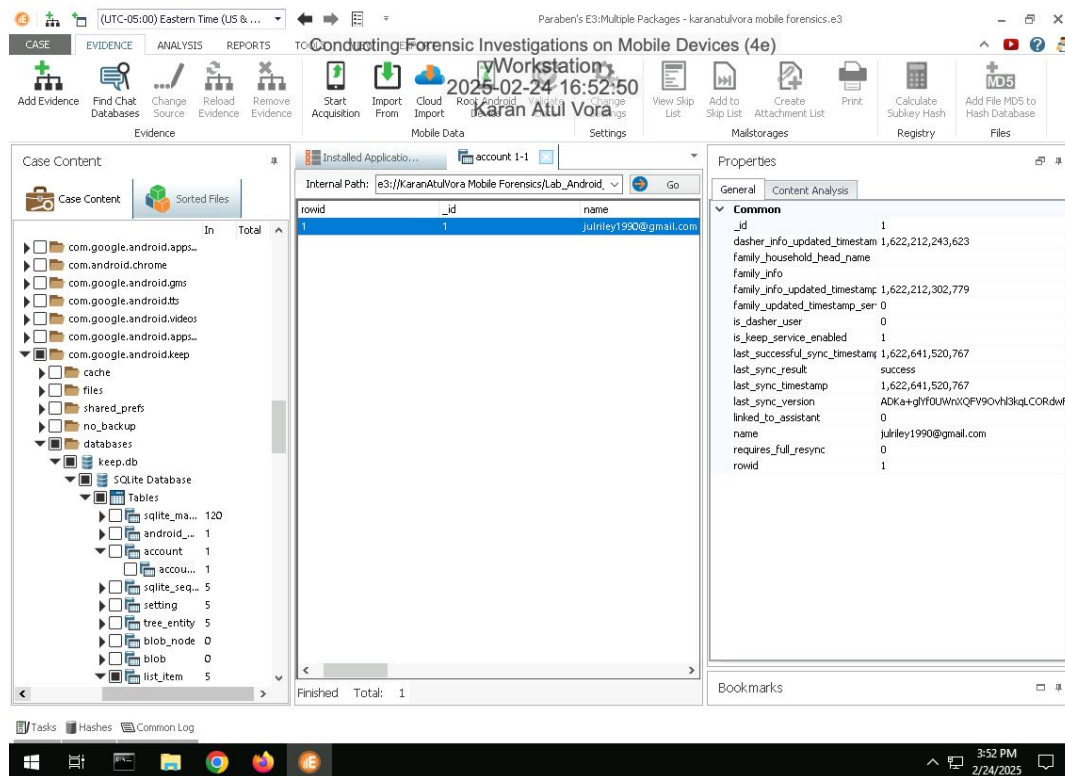
Visit Date	URL
6/2/2021 10:26:21 AM	https://www.mariedaire.com/fashion/a35927079/summer-fashion-t
6/2/2021 10:25:00 AM	https://vogue.com/
6/2/2021 10:25:00 AM	https://vogue.com/
6/2/2021 10:25:00 AM	https://www.vogue.com/
6/2/2021 10:23:07 AM	https://cars.usnews.com/cars-trucks/porsche/911
6/2/2021 10:22:41 AM	https://www.tesla.com/models
6/2/2021 10:21:30 AM	https://www.glamour.com/
6/2/2021 10:21:07 AM	http://glamour.com/
6/2/2021 10:21:07 AM	https://glamour.com/
6/2/2021 10:21:07 AM	https://www.glamour.com/
6/2/2021 10:18:53 AM	https://www.google.com/search?q=fashion+trends+2021&oeq=fas
6/2/2021 10:02:43 AM	https://www.ebay.com/motors/collector_car
6/2/2021 10:02:41 AM	https://www.autonews.com/
6/2/2021 9:55:26 AM	https://www.autonews.com/
6/2/2021 9:49:09 AM	https://www.google.com/search?q=Porsche+911+prices&oeq=Pors
6/2/2021 9:47:46 AM	https://www.google.com/search?q=New+tesla+models&oeq=New

The bottom of the screen shows the Windows taskbar with the time 3:45 PM and date 2/24/2025.

17. Make a screen capture showing the contents of the list_item 1-5 table.



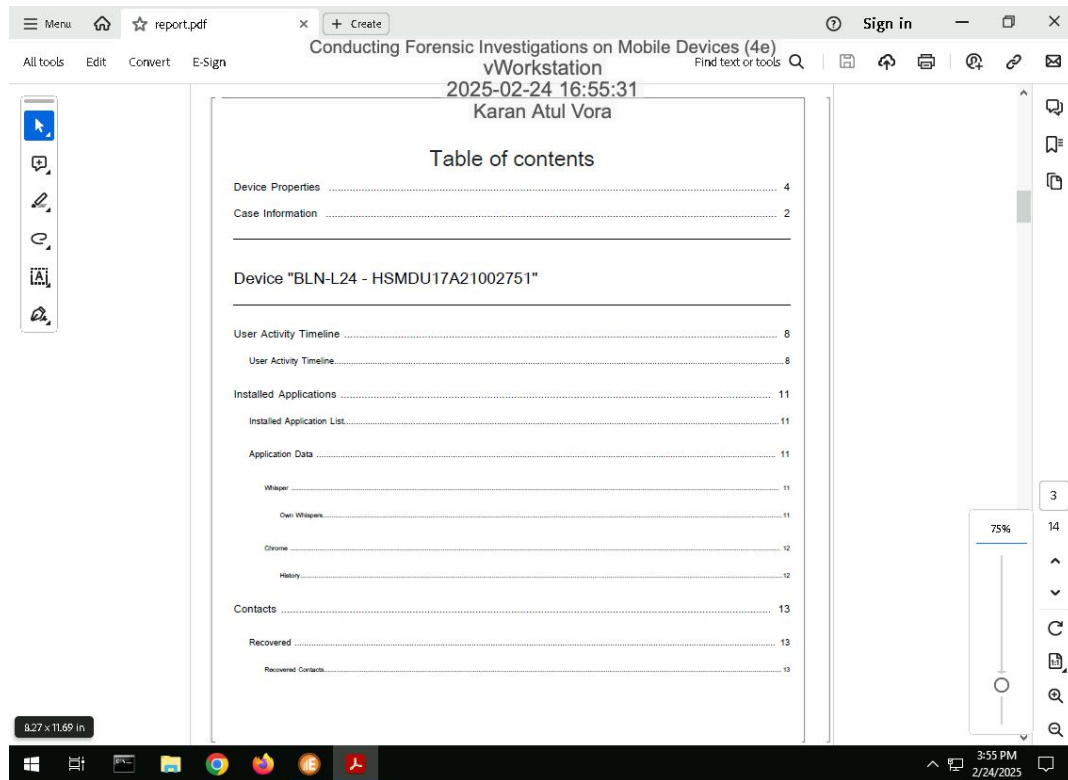
20. Make a screen capture showing the Keep Notes account owner.



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23. Make a screen capture showing the Investigative Report's Table of Contents.



Section 3: Challenge and Analysis

Part 1: Research Report Writing for Digital Forensics

Prepare a brief summary of the appropriate structure and best practices for preparing a digital forensics report.

Key sections to include are: -Overview/Case Summary: A brief explanation of the case, including how the examiner became involved.Forensic Acquisition & Exam Preparation: Detailed steps of evidence acquisition and preparation, ensuring proper chain of custody.Findings and Analysis: The core of the report, explaining what was discovered during the examination, including data and tools used.Conclusion: Summarizing the results and the implications of the findings.

Best Practices: -Maintain objectivityBe clear and conciseEnsure accuracyProvide a clear timelineDocument tools and methodsUse proper chain of custodyKeep it structuredAvoid biasMake it legally defensibleProofread

Part 2: Draft a Forensic Report

Case Summary

The Madison Police Department confiscated two smartphones—one iOS and one Android—as part of an investigation into an organized car theft operation. The suspects, using the codenames Bonnie and Clyde, were linked to multiple stolen vehicles. The goal of this investigation was to extract and analyze digital evidence from these devices using Paraben's E3 forensic software to identify incriminating data such as contacts, messages, call logs, notes, images, and application data.

Findings and Analysis

iOS Device Analysis:Contacts & Messages:Several messages linked to stolen vehicles were found, including communications with a contact named "Stinky" discussing a specific car and another with "ICE Mylady" indicating a vehicle's location in Windy City.Calendar & Notes:A calendar event with a car icon suggested premeditated vehicle theft.Notes contained crucial information, including awareness of a known license plate number and details about replacing plates.Images & Evidence Comparisons:Thirteen car images, some displaying license plates, were found.A comparison of two forensic snapshots revealed missing and altered notes, indicating possible tampering between extractions.Android Device Analysis:

Device Information & User Identification:ICE contacts identified the device owner as "Bonnie."Email accounts included a contact named "Tom Audi&BMW," suggesting a link to car sales.Browser History & Whisper Chats:Browsing history included searches related to stolen car models and transactions on eBay Motors.Whisper chat messages referenced a Porsche 911 and a transaction location in Windy City, corroborating findings from the iOS device.User Activity & Application Data:Activity logs confirmed usage of Whisper, Chrome, VPN, and contacts during the suspected crime timeframe.Keep Notes contained records of license plate alterations.

Conclusion

The forensic analysis provided substantial evidence linking the suspects to organized car theft activities. The synchronized findings from both devices—matching messages, notes, and locations—strongly indicate coordinated criminal behavior. The discovery of modified data further suggests attempts to cover their tracks. This report will support further legal proceedings and assist law enforcement in charging the suspects accordingly.