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PRACTICAL NO. 1

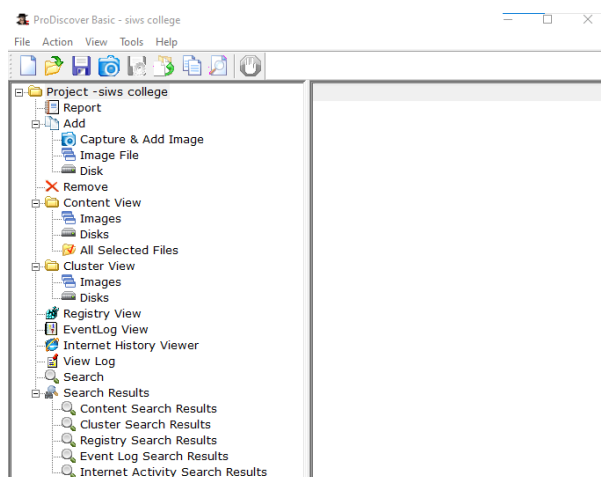
AIM :

THEORY :

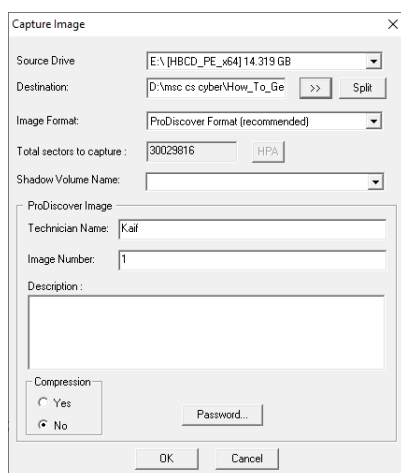
Step1 : first open ProDiscover basic and start with new case



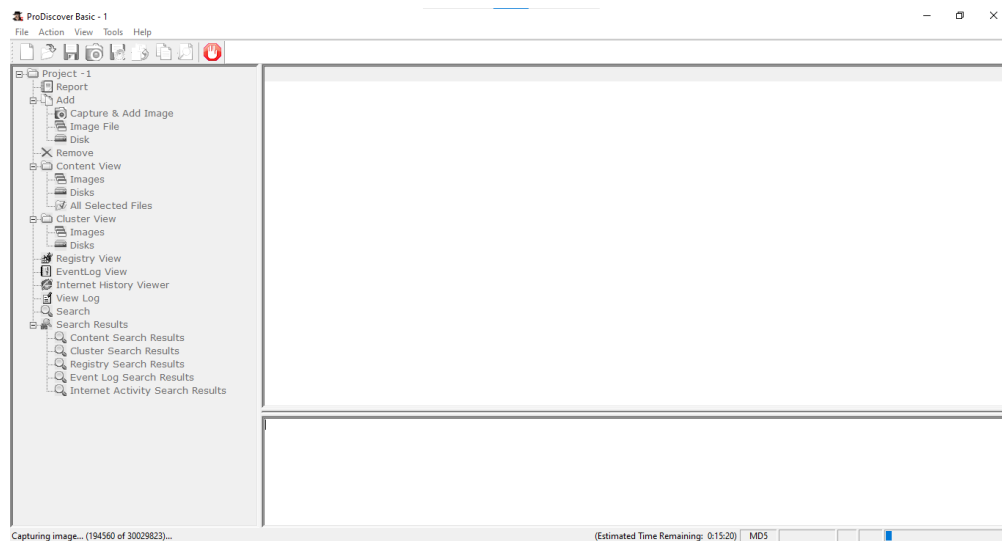
Step 2 : the created project appears in left pane and select add capture and add image



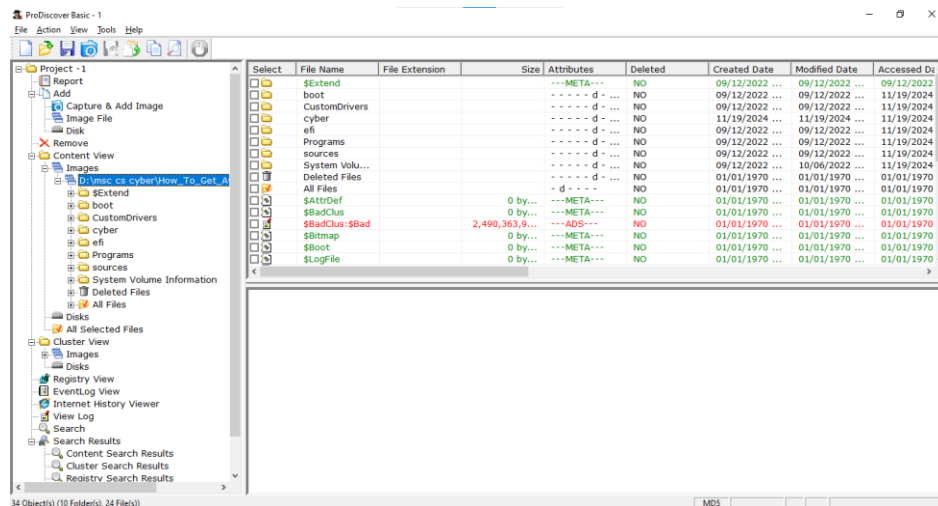
Step 3:



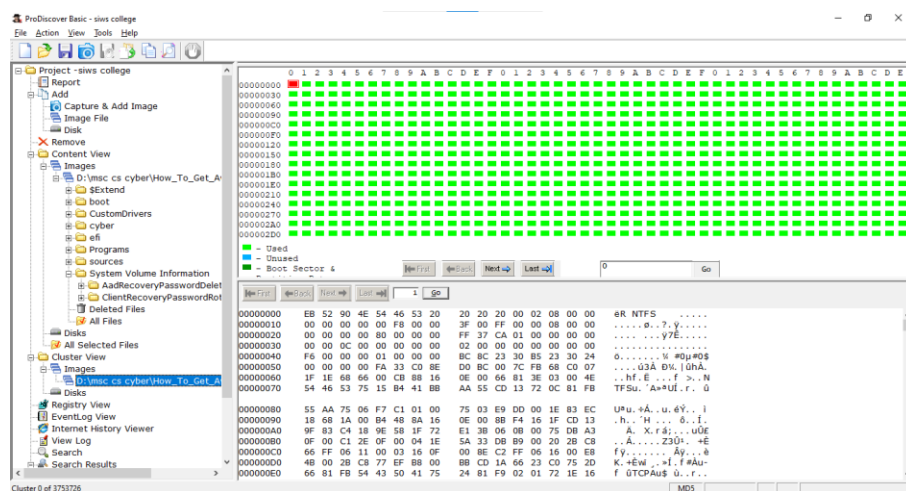
Step 4:



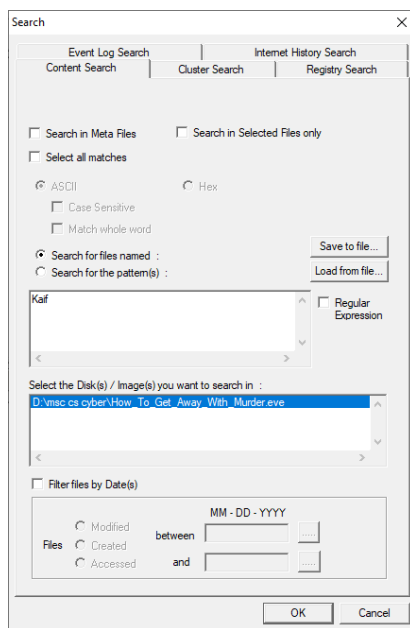
Step 5:



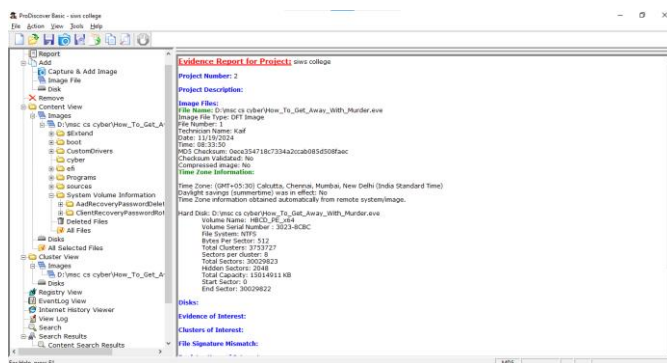
Step 6:



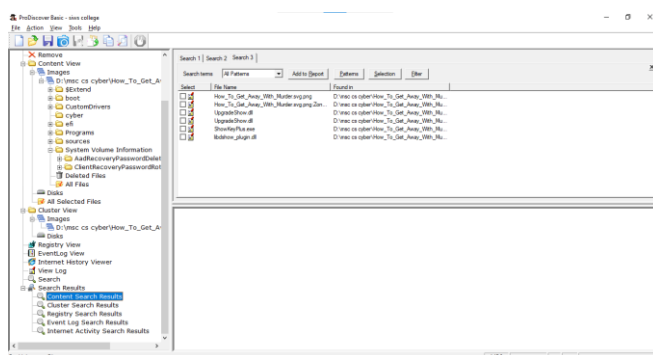
Step 7:



Step 8:



Step 9:



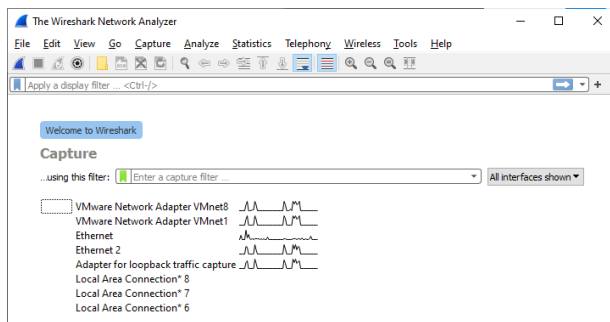
CONCLUSION : ABOVE PROGRAM HAS SUCCESSFULLY EXECUTED

PRACTICAL NO. 2

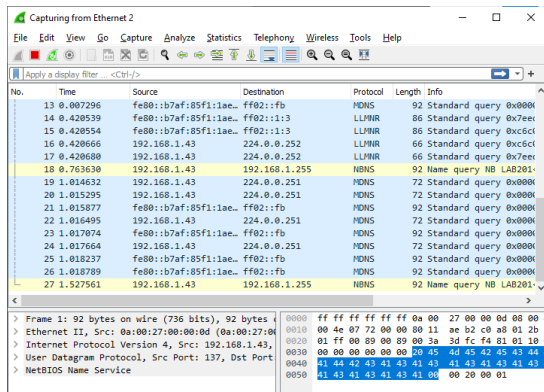
AIM :

THEORY :

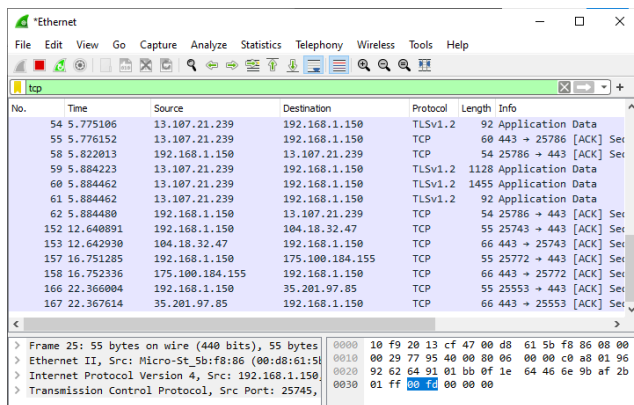
Step1:



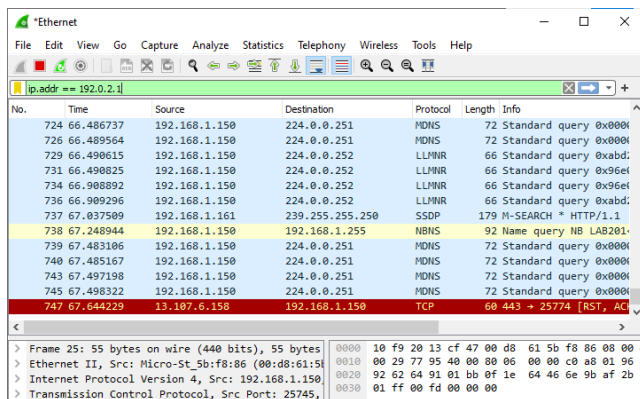
Step2:



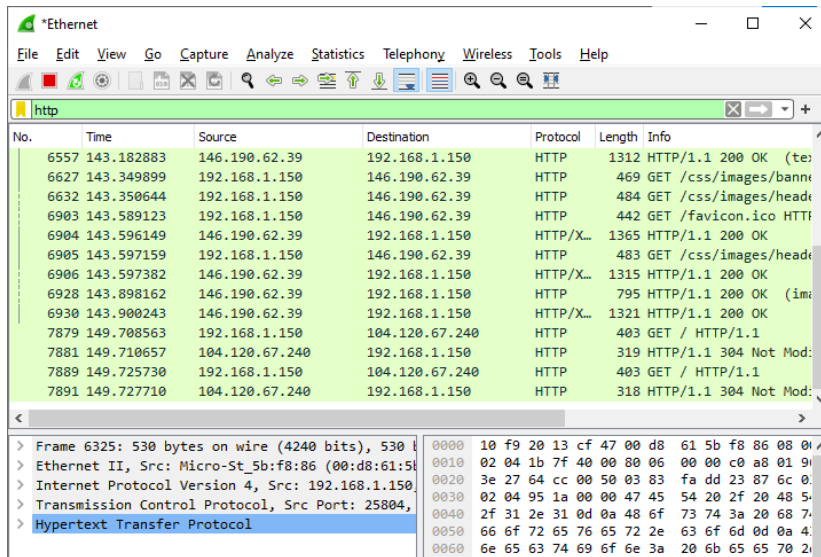
Step3:



Step4:



Step5:



*Ethernet

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

http

No.	Time	Source	Destination	Protocol	Length	Info
6557	143.182883	146.190.62.39	192.168.1.150	HTTP	1312	HTTP/1.1 200 OK (text/css)
6627	143.349899	192.168.1.150	146.190.62.39	HTTP	469	GET /css/images/banne
6632	143.350644	192.168.1.150	146.190.62.39	HTTP	484	GET /css/images/heads
6903	143.589123	192.168.1.150	146.190.62.39	HTTP	442	GET /favicon.ico HTTP
6904	143.596149	146.190.62.39	192.168.1.150	HTTP/X...	1365	HTTP/1.1 200 OK
6905	143.597159	192.168.1.150	146.190.62.39	HTTP	483	GET /css/images/heads
6906	143.597382	146.190.62.39	192.168.1.150	HTTP/X...	1315	HTTP/1.1 200 OK
6928	143.898162	146.190.62.39	192.168.1.150	HTTP	795	HTTP/1.1 200 OK (image)
6930	143.900243	146.190.62.39	192.168.1.150	HTTP/X...	1321	HTTP/1.1 200 OK
7879	149.708563	192.168.1.150	104.120.67.240	HTTP	403	GET / HTTP/1.1
7881	149.710657	104.120.67.240	192.168.1.150	HTTP	319	HTTP/1.1 304 Not Mod
7889	149.725730	192.168.1.150	104.120.67.240	HTTP	403	GET / HTTP/1.1
7891	149.727710	104.120.67.240	192.168.1.150	HTTP	318	HTTP/1.1 304 Not Mod

< >

> Frame 6325: 530 bytes on wire (4240 bits), 530 bytes captured (4240 bits) on interface 0

> Ethernet II, Src: Micro-St_5b:f8:86 (00:d8:61:5b:f8:86), Dst: 192.168.1.150 (08:00:27:64:cc:00)

> Internet Protocol Version 4, Src: 192.168.1.150, Dst: 146.190.62.39

> Transmission Control Protocol, Src Port: 25804, Dst Port: 80

> Hypertext Transfer Protocol

0000 10 f9 20 13 cf 47 00 d8 61 5b f8 86 08 00 00 00

0010 02 04 1b 7f 40 00 80 06 00 00 c0 a8 01 90 00 00

0020 3e 27 64 cc 00 50 03 83 fa dd 23 87 6c 00 00 00

0030 02 04 95 1a 00 00 47 45 54 20 2f 20 48 50 00 00

0040 2f 31 2e 31 0d 0a 48 6f 73 74 3a 20 68 70 00 00

0050 66 6f 72 65 76 65 72 2e 63 6f 6d 0d 0a 40 00 00

0060 6e 65 63 74 69 6f 6e 3a 20 6b 65 65 70 20 00 00

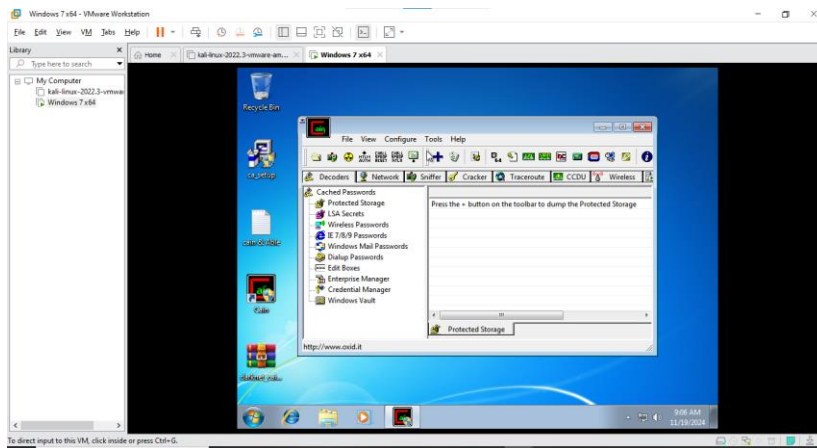
CONCLUSION : ABOVE PROGRAM HAS SUCCESFULLY EXECUTED

PRACTICAL NO. 3

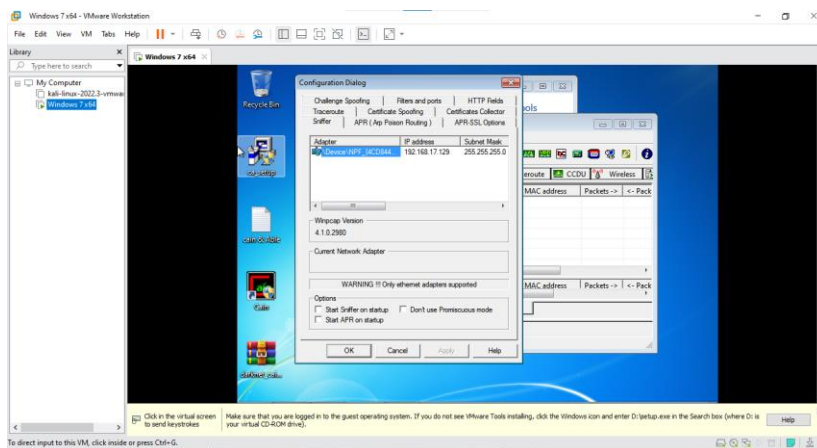
AIM :

THEORY :

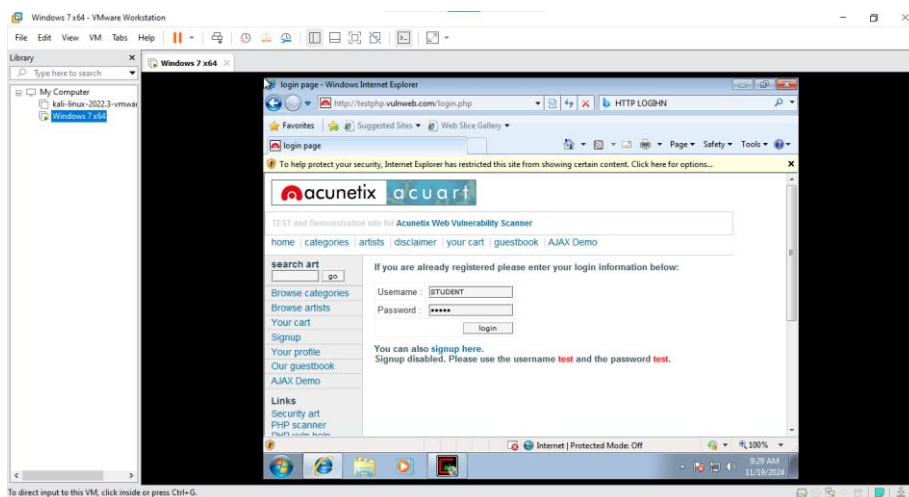
Step 1:



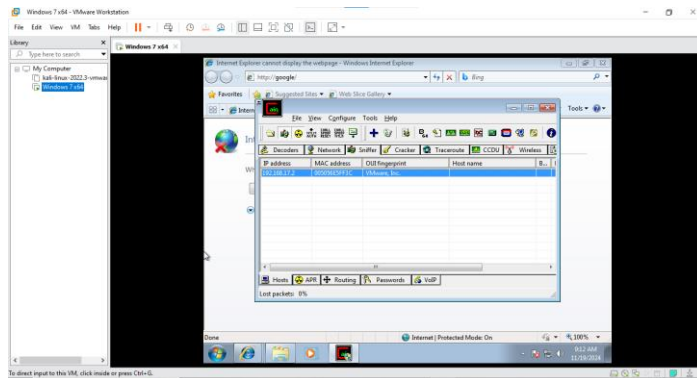
Step2:



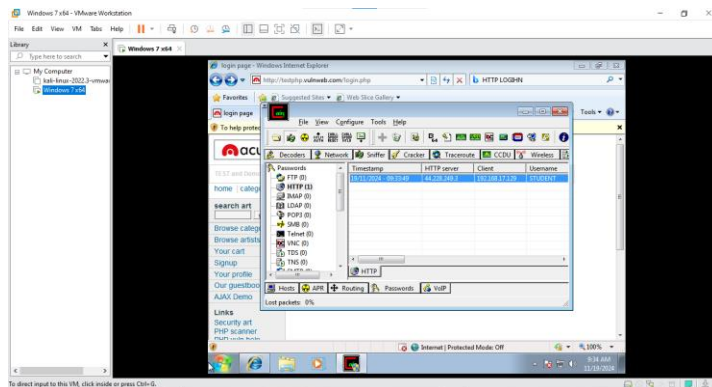
Step3:



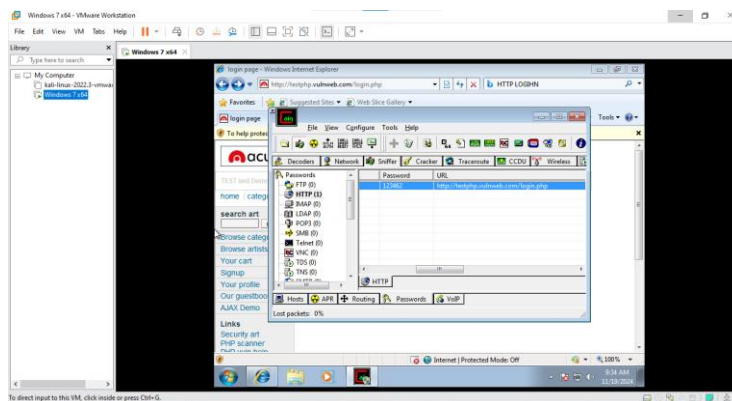
Step4:



Step5:



Step6:



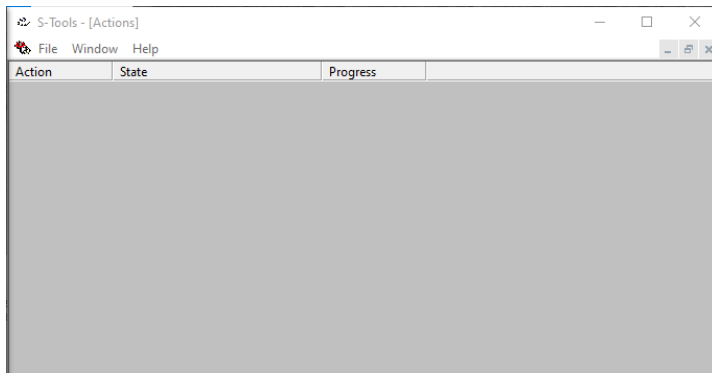
CONCLUSION : ABOVE PROGRAM HAS SUCCESSFULLY EXECUTED

PRACTICAL NO. 4

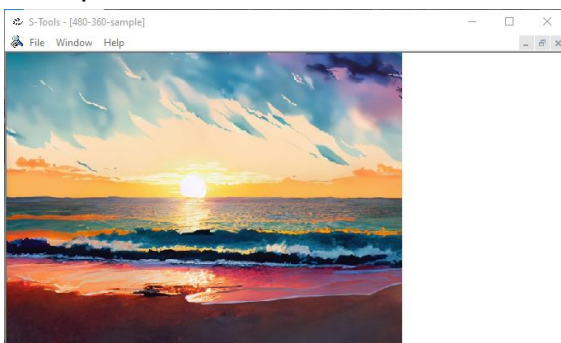
AIM :

THEORY :

Step 1:



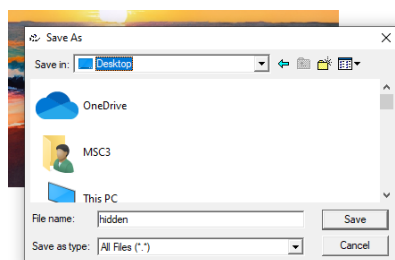
Step 2:



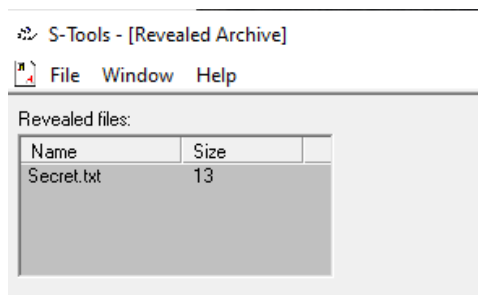
Step 3:



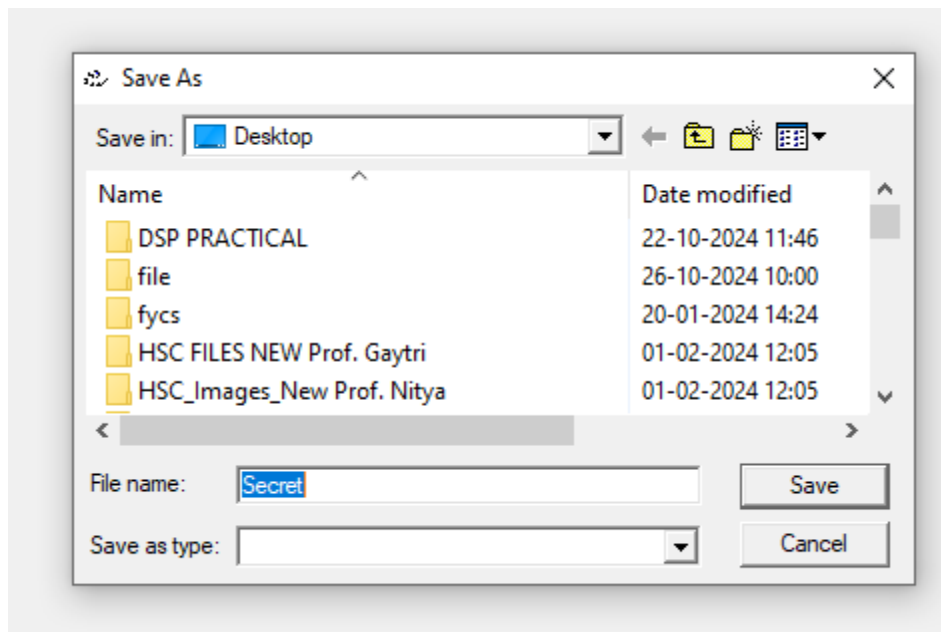
Step 4:



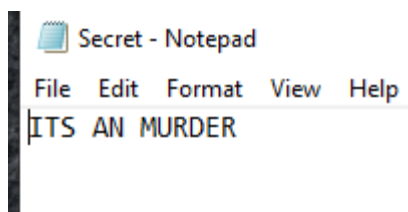
Step 5:



Step 6:



Step 7:



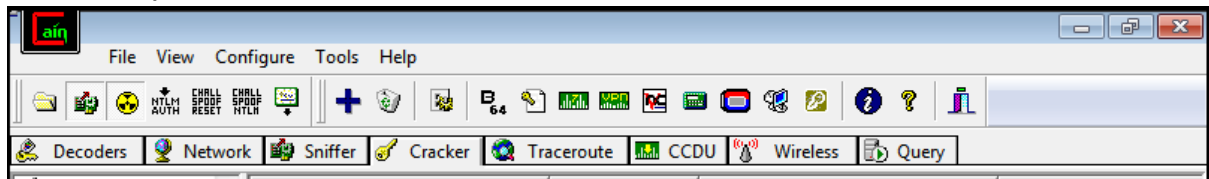
CONCLUSION : ABOVE PROGRAM HAS SUCCESFULLY EXECUTED

PRACTICAL NO. 5

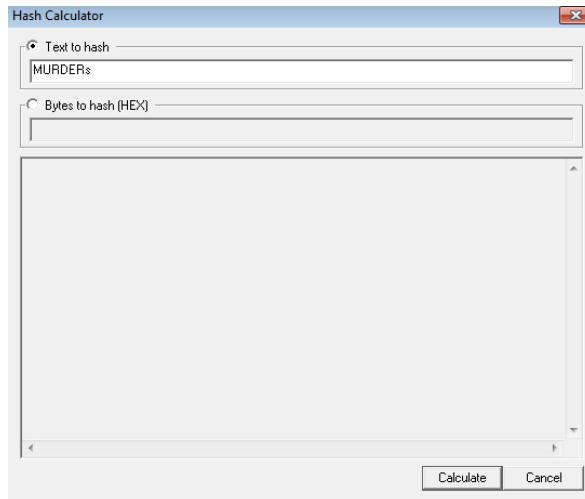
AIM :

THEORY :

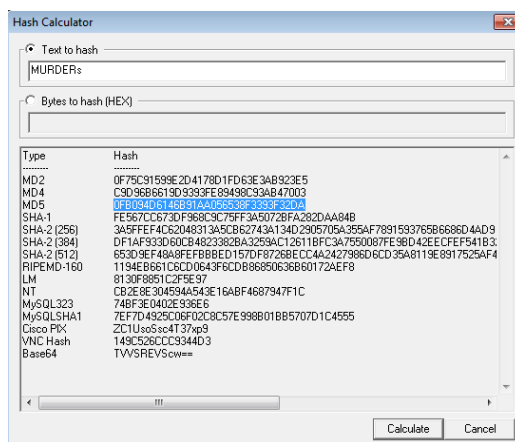
Step 1:



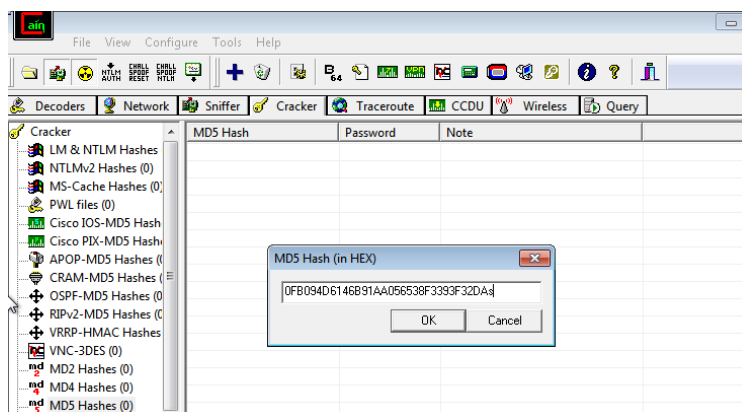
Step 2:



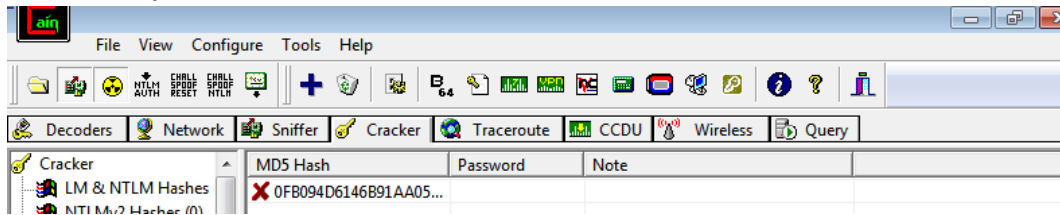
Step 3:



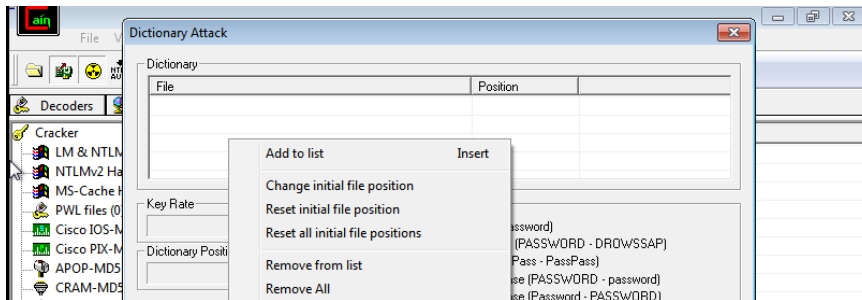
Step 4:



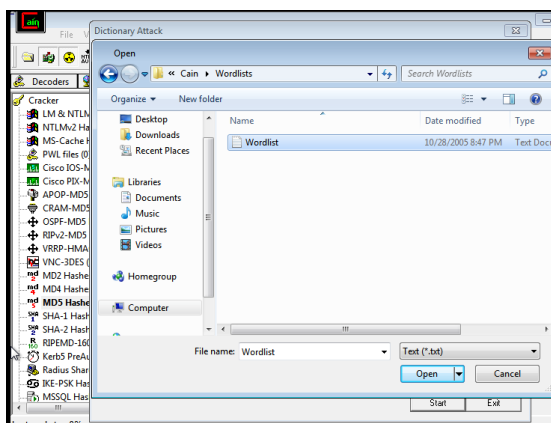
Step 5:



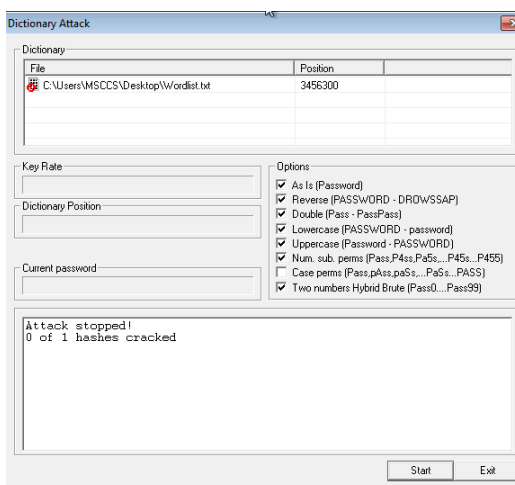
Step 6:



Step 7:



Step 8:



CONCLUSION : ABOVE PROGRAM HAS SUCCESFULLY EXECUTED

PRACTICAL NO. 6

AIM :

THEORY :

Step 1: open ftk(toolkit app)

Step 2: Add investigator's name, case information, case number, case path & case folder

New Case

AccessData's
Forensic Toolkit®-FTK®
The Complete Analysis Tool

Wizard for Creating a New Case

Investigator Name: para

Case Information

Case Number: 145

Case Name: hello

Case Path: C:\Users\MSC7\Desktop\forensic\ Browse...

Case Folder: C:\Users\MSC7\Desktop\forensic\hello

Case Description:

Next > Cancel

Step 3: add forensic examiner information, then click next

FTK Report Wizard - Case Information

Forensic Examiner Information

The following information will appear on the Case Information page of the report:

Agency/Company: id

Examiner's Name: jagat

Address: Bunbae 70

Phone: 9220001212 Fax:

E-Mail: jagat@gmail.com

Comments: none

< Back Next > Cancel

Step 4: Click next

Case Log Options

The case log is a text file named FTK.log in the case folder. It gets created automatically by FTK and contains a record of events that occur during the course of the case. You can choose which type of events you would like to be logged.

You can also add your own comments to the log file at any time by selecting "Add Case Log Entry..." under the "Tools" menu item, and you can view the log file by selecting "View Case Log" under the "Tools" menu item.

Events to go in the Case Log

<input checked="" type="checkbox"/> Case and evidence events	Events related to the addition and processing of file items when evidence is added or when using Analysis Tools later in the case.
<input checked="" type="checkbox"/> Error messages	Events related to any error conditions encountered during the case.
<input checked="" type="checkbox"/> Bookmarking events	Events related to the addition and modification of bookmarks.
<input checked="" type="checkbox"/> Searching events	Events related to searching. All search queries and resulting hit counts will be recorded.
<input checked="" type="checkbox"/> Data carving / Internet searches	Events related to special data carving or internet keyword searches that are performed during the case.
<input checked="" type="checkbox"/> Other events	Other events not related to the above, such as copying, viewing, and ignoring files.

< Back Next > Cancel

Step 5: click next

Evidence Processing Options

Processes to Perform

Evidence is added to a case in several steps. Some of the processes are always performed, while others are optional, depending on your needs and time/resource constraints.

<input checked="" type="checkbox"/> MD5 Hash	An MD5 hash is a 16 byte value generated based upon a file's content. It is used to uniquely identify files. Hashes can be used to verify a file's integrity, or to identify duplicate files. MD5 hashes are used by the KFF to identify known files.
<input checked="" type="checkbox"/> SHA1 Hash	A SHA1 hash is a 20 byte value. The SHA1 hashing algorithm is newer than MD5, but is not yet as widely used.
<input checked="" type="checkbox"/> KFF Lookup	KFF (Known File Filter) is a utility that compares MD5 file hashes against a database of MD5 hashes from known files. The purpose of KFF is to eliminate files known to be unimportant, or to alert the investigator to known illicit or dangerous files.
<input checked="" type="checkbox"/> Entropy Test	For unknown file types, an entropy test is used to determine whether the file's data is compressed or encrypted. Such files contain no plain text and will not be indexed. Unnecessary indexing of such files can waste large amounts of time and resources.
<input checked="" type="checkbox"/> Full Text Index	The Forensic Toolkit includes a very powerful search engine, dSearch, which enables the investigator to do instantaneous searching of textual data. In order to take advantage of this search feature, the data must first be indexed.
<input checked="" type="checkbox"/> Store Thumbnails	Create and store thumbnails for all graphics in the case. This option speeds up browsing through the Graphics view at the expense of consuming more space in the case folder.
<input checked="" type="checkbox"/> Decrypt EFS Files	Automatically locate and attempt to decrypt EFS encrypted files found on NTFS partitions within the case. (Requires AccessData Password Recovery Toolkit 5.20 or newer)
<input checked="" type="checkbox"/> File Listing Database	Create a Microsoft Access (Jet) database containing a list of all files in the case. The attributes included are based on the Preprocessing File Listing Database Column Setting. This database can be recreated with custom column settings in Copy Special.
<input type="checkbox"/> HTML File Listing	Create an HTML version of the File Listing.
<input type="checkbox"/> Data Carve	Automatically find specific file types embedded in other files and from free space. Retrieve results using Data Carving Option on Tools Menu. Carving Options
<input type="checkbox"/> Registry Reports	Generate common registry reports during preprocessing.

< Back Next > Cancel

Step 6: click email emphasis, then next

Refine Case - Default

Refine Case - Default

In order to save time and resources, and/or to eliminate irrelevant data, you may choose to exclude certain kinds of data from the case. Here, you can choose default inclusion/exclusion settings that will apply to each evidence item that gets added to the case. To exclude data, make any changes to the settings below. Note: any items that get excluded will not appear anywhere in the case, and will be inaccessible.

Include All Items Optimal Settings **Email Emphasis** Text Emphasis Graphics Emphasis

Unconditionally Add

☐ File Slack (data beyond the end of the logical file but within the area allocated to that file by the file system)

☐ Free Space (areas in the file system not currently allocated to any file, but possibly containing deleted file data)

☐ KFF Ignorable Files (files found by KFF to be forensically unimportant, i.e., OS system files, known applications, etc.)

☐ Extract files from KFF ignorable containers

Conditionally Add

Add other items to the case only if they satisfy BOTH the file status and the file type criteria

File Status Criteria	Encryption Status:	Email Status:	File Type Criteria
<input type="radio"/> Deleted	<input type="radio"/> Encrypted	<input checked="" type="radio"/> From email	<input checked="" type="checkbox"/> Documents
<input type="radio"/> Not deleted	<input type="radio"/> Not encrypted	<input type="radio"/> Not from email	<input checked="" type="checkbox"/> Spreadsheets
<input checked="" type="radio"/> Either	<input checked="" type="radio"/> Either	<input type="radio"/> Either	<input checked="" type="checkbox"/> Databases
<input type="checkbox"/> Include Duplicate Files	<input type="checkbox"/> OLE Streams		<input checked="" type="checkbox"/> Graphics
			<input checked="" type="checkbox"/> Multimedia
			<input checked="" type="checkbox"/> Email msgs
			<input type="checkbox"/> Executables
			<input checked="" type="checkbox"/> Archives
			<input type="checkbox"/> Folders
			<input checked="" type="checkbox"/> Other Known
			<input checked="" type="checkbox"/> Unknown

< Back Next > Cancel

Step 7: click next

Refine Index - Default

Refine Index - Default

In order to save time and resources, and/or to make searching more efficient, you may choose to exclude certain kinds of data from being indexed. Here, you can choose default settings that will apply to each evidence item that gets added to the case. To exclude items from being indexed, make any changes to the settings below. Note: any items that don't get indexed initially can be indexed later by clicking on "Analysis Tools" under the "Tools" menu item.

Unconditionally Index

☐ File Slack (data beyond the end of the logical file but within the area allocated to that file by the file system)

☐ Free Space (areas in the file system not currently allocated to any file, but possibly containing deleted file data)

☐ KFF Ignorable Files (files found by KFF to be forensically unimportant, i.e., OS system files, known applications, etc.)

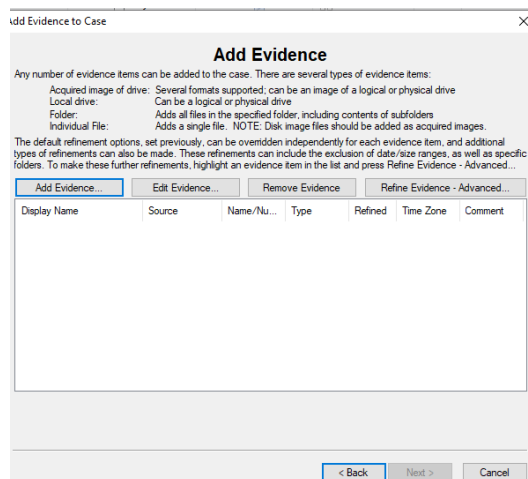
Conditionally Index

Index other items in the case only if they satisfy BOTH the file status and the file type criteria

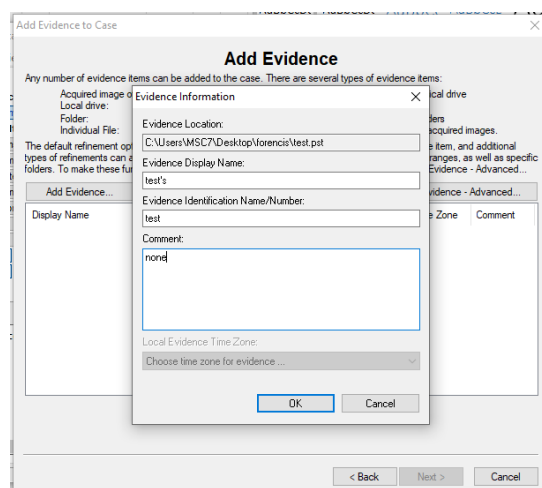
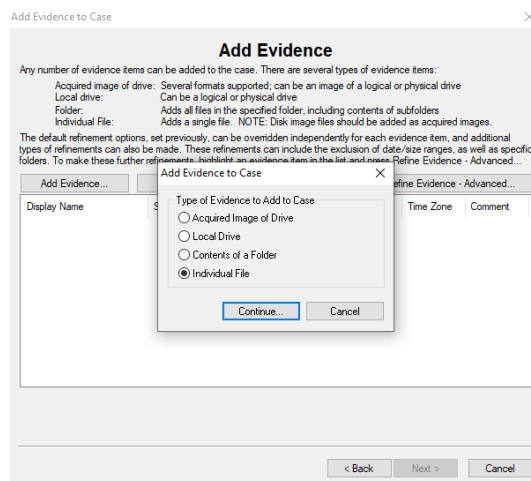
File Status Criteria	Encryption Status:	Email Status:	File Type Criteria
<input type="radio"/> Deleted	<input type="radio"/> Encrypted	<input checked="" type="radio"/> From email	<input checked="" type="checkbox"/> Documents
<input type="radio"/> Not deleted	<input type="radio"/> Not encrypted	<input type="radio"/> Not from email	<input checked="" type="checkbox"/> Spreadsheets
<input checked="" type="radio"/> Either	<input checked="" type="radio"/> Either	<input type="radio"/> Either	<input checked="" type="checkbox"/> Databases
<input type="checkbox"/> Include Duplicate Files	<input type="checkbox"/> OLE Streams		<input checked="" type="checkbox"/> Graphics
			<input checked="" type="checkbox"/> Multimedia
			<input checked="" type="checkbox"/> Email msgs
			<input type="checkbox"/> Executables
			<input checked="" type="checkbox"/> Archives
			<input type="checkbox"/> Folders
			<input checked="" type="checkbox"/> Other Known
			<input checked="" type="checkbox"/> Unknown

< Back Next > Cancel

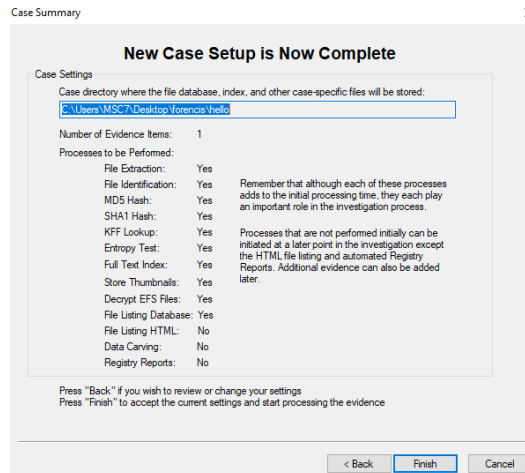
Step 8: add evidence



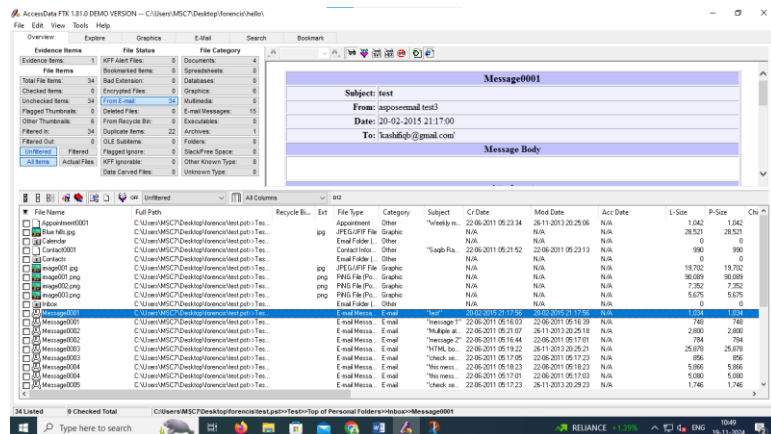
Step 9: click individual file, add a .pst file and location then click ok



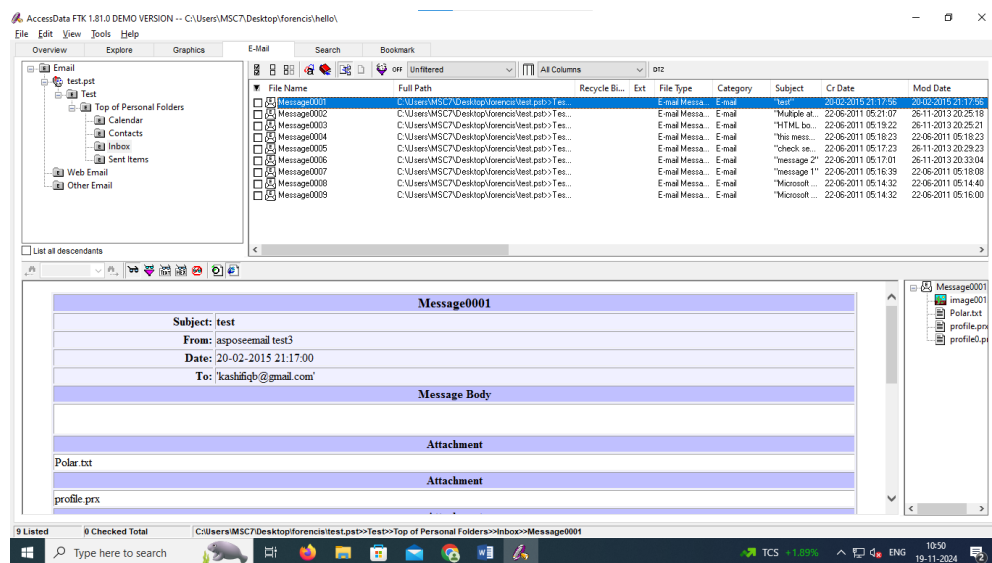
Step 10: click finish

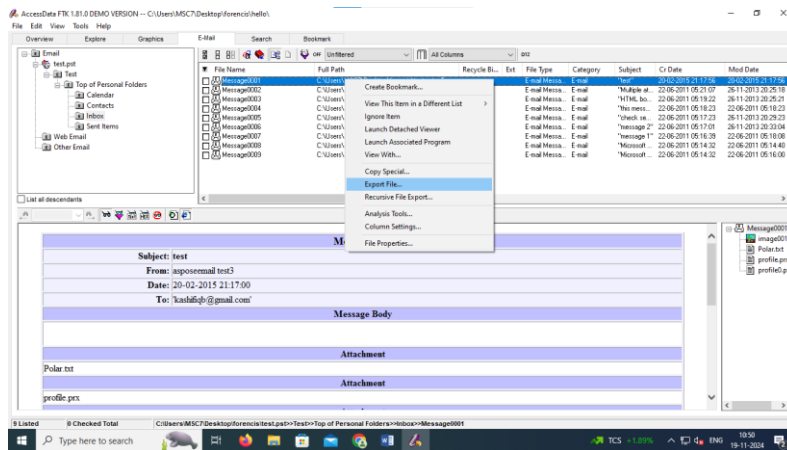


Step 11: click on from email, any message below.

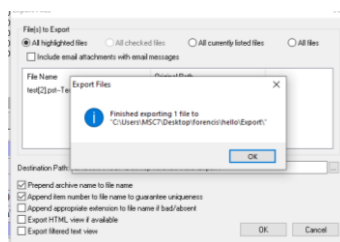
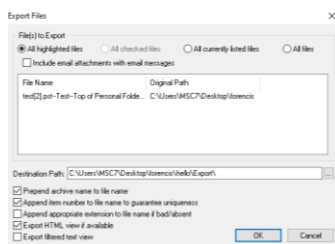


Step 12: click on email, any message & then right click on export file.

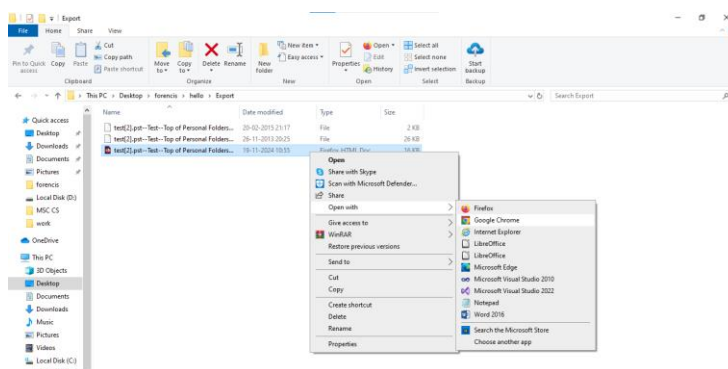
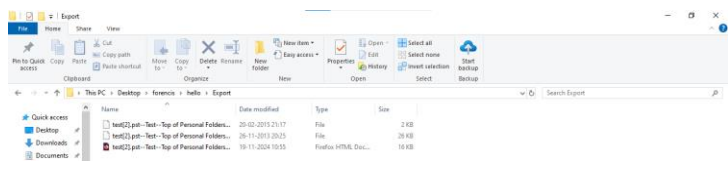




Step 13 : tick the prepend, append and export html & then click ok

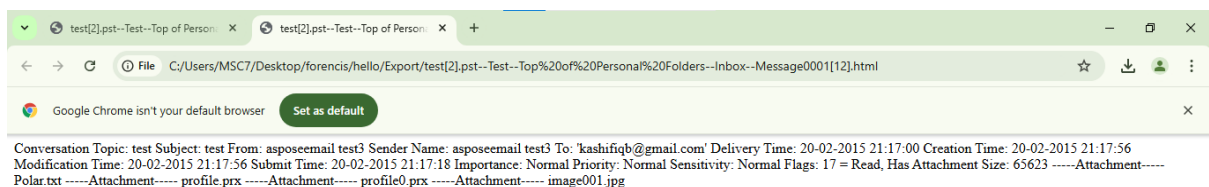
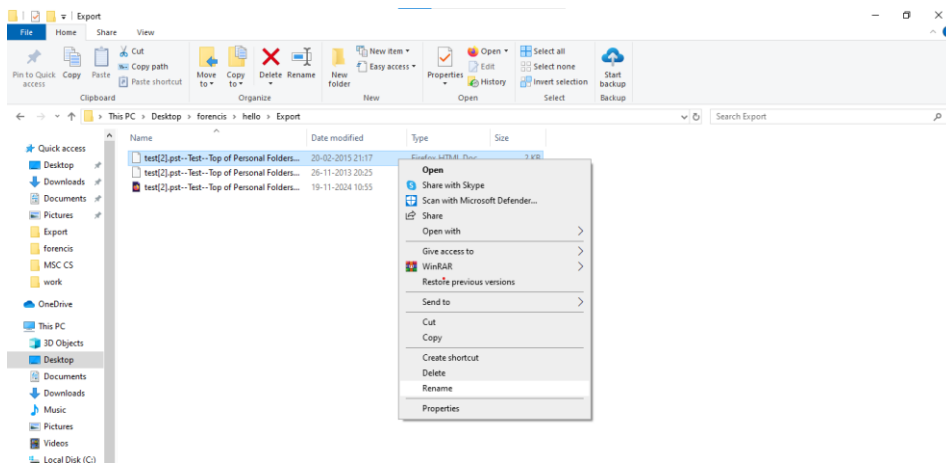


Step 14: open the export file, view the html file and then rename a file to html.





Rename the file to .html



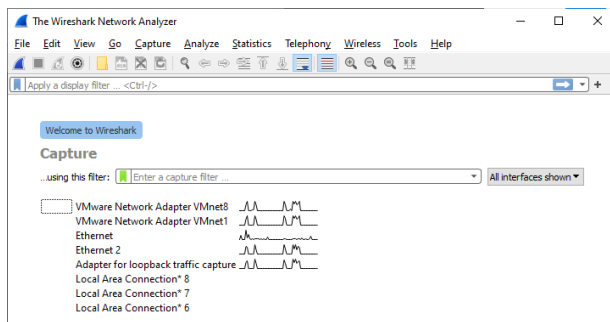
CONCLUSION : ABOVE PROGRAM HAS SUCCESFULLY EXECUTED

PRACTICAL NO. 7

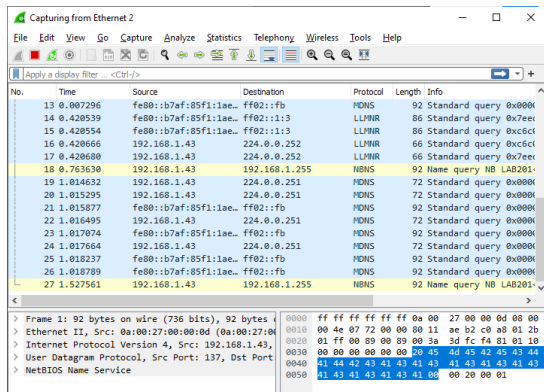
AIM :

THEORY :

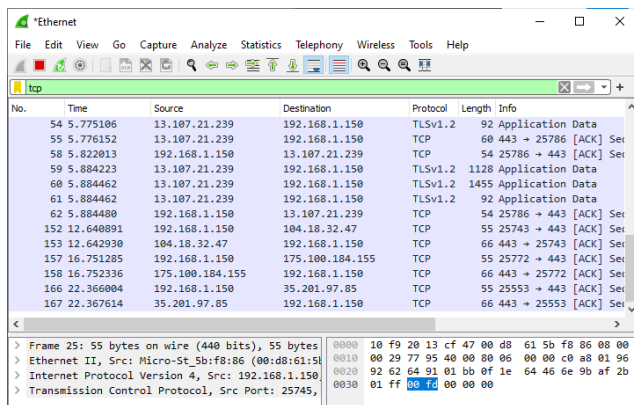
Step1:



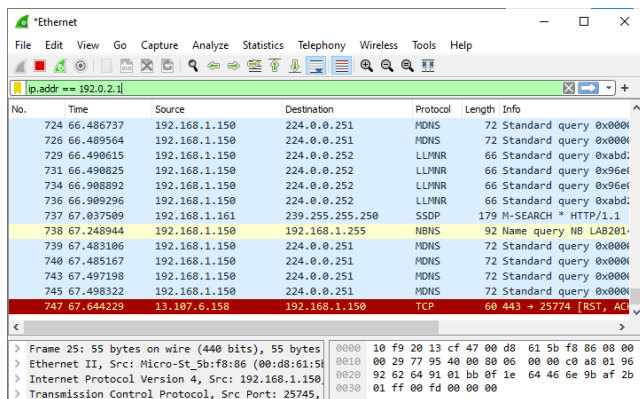
Step2:



Step3:



Step4:



Step5:

The image shows a Wireshark packet capture window titled "*Ethernet". The interface includes a menu bar (File, Edit, View, Go, Capture, Analyze, Statistics, Telephony, Wireless, Tools, Help) and a toolbar with various icons for packet capture and analysis. The main display area shows a list of captured packets, with the selected packet (No. 6325) highlighted in green. The packet list table is as follows:

No.	Time	Source	Destination	Protocol	Length	Info
6557	143.182883	146.190.62.39	192.168.1.150	HTTP	1312	HTTP/1.1 200 OK (text/css)
6627	143.349899	192.168.1.150	146.190.62.39	HTTP	469	GET /css/images/banne
6632	143.350644	192.168.1.150	146.190.62.39	HTTP	484	GET /css/images/heads
6903	143.589123	192.168.1.150	146.190.62.39	HTTP	442	GET /favicon.ico HTTP
6904	143.596149	146.190.62.39	192.168.1.150	HTTP/X...	1365	HTTP/1.1 200 OK
6905	143.597159	192.168.1.150	146.190.62.39	HTTP	483	GET /css/images/heads
6906	143.597382	146.190.62.39	192.168.1.150	HTTP/X...	1315	HTTP/1.1 200 OK
6928	143.898162	146.190.62.39	192.168.1.150	HTTP	795	HTTP/1.1 200 OK (image)
6930	143.900243	146.190.62.39	192.168.1.150	HTTP/X...	1321	HTTP/1.1 200 OK
7879	149.708563	192.168.1.150	104.120.67.240	HTTP	403	GET / HTTP/1.1
7881	149.710657	104.120.67.240	192.168.1.150	HTTP	319	HTTP/1.1 304 Not Mod
7889	149.725730	192.168.1.150	104.120.67.240	HTTP	403	GET / HTTP/1.1
7891	149.727710	104.120.67.240	192.168.1.150	HTTP	318	HTTP/1.1 304 Not Mod

The packet details pane on the right shows the selected packet (No. 6325) expanded, revealing the following structure:

- > Frame 6325: 530 bytes on wire (4240 bits), 530 bytes captured (4240 bits) on interface 0
- > Ethernet II, Src: Micro-St_5b:f8:86 (00:d8:61:5b:f8:86), Dst: 192.168.1.150 (08:00:27:64:cc:00)
- > Internet Protocol Version 4, Src: 192.168.1.150, Dst: 146.190.62.39
- > Transmission Control Protocol, Src Port: 25804, Dst Port: 80
- > Hypertext Transfer Protocol

The packet bytes pane on the right shows the raw data of the selected packet, starting with the Ethernet II header:

```
0000 10 f9 20 13 cf 47 00 d8 61 5b f8 86 08 00 00 00
0010 02 04 1b 7f 40 00 80 06 00 00 c0 a8 01 90 00 00
0020 3e 27 64 cc 00 50 03 83 fa dd 23 87 6c 00 00 00
0030 02 04 95 1a 00 00 47 45 54 20 2f 20 48 50 00 00
0040 2f 31 2e 31 0d 0a 48 6f 73 74 3a 20 68 70 00 00
0050 66 6f 72 65 76 65 72 2e 63 6f 6d 0d 0a 48 00 00
0060 6e 65 63 74 69 6f 6e 3a 20 6b 65 65 70 20 20 20
```

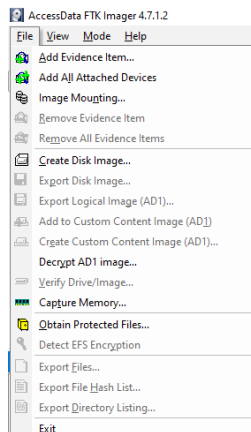
CONCLUSION : ABOVE PROGRAM HAS SUCCESFULLY EXECUTED

PRACTICAL NO. 8

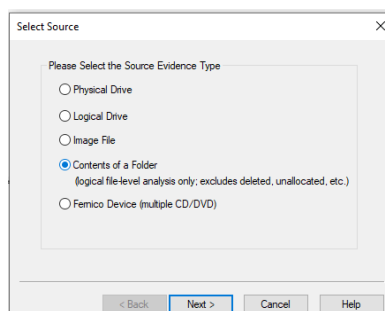
AIM :

THEORY :

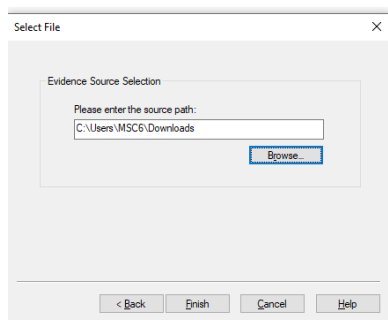
Step1: Create a Disk Image



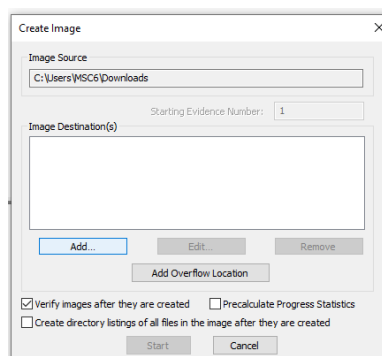
Step2: Select Source as Contents of a Folder



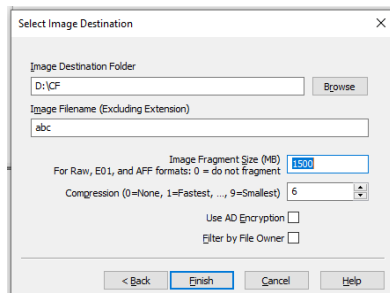
Step3: Select Evidence Source



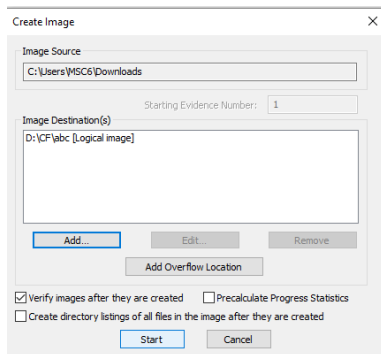
Step4: Select Image Source



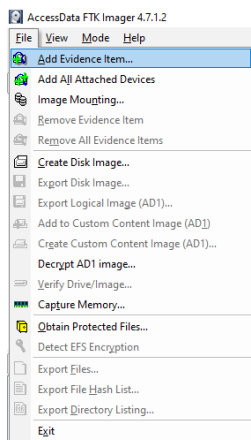
Step5: Select Image Destination



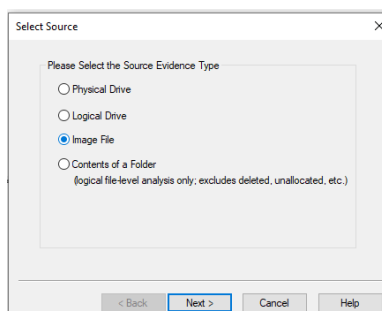
Step6: Select Add Image Destination



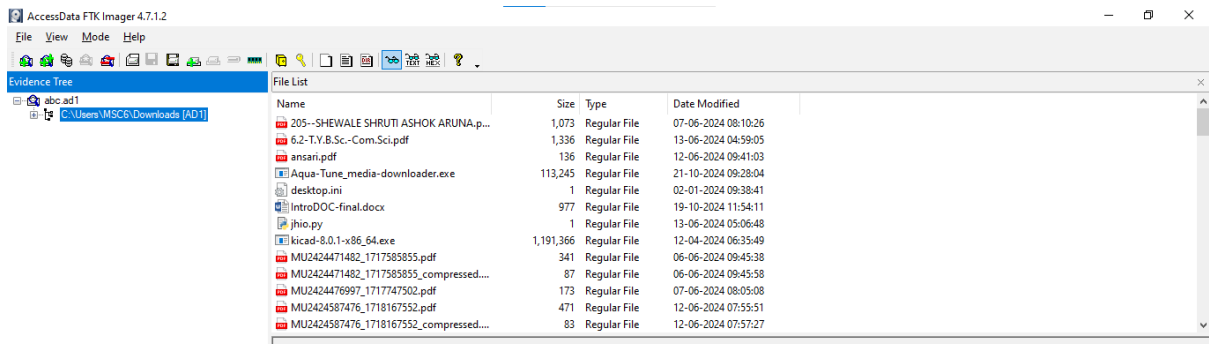
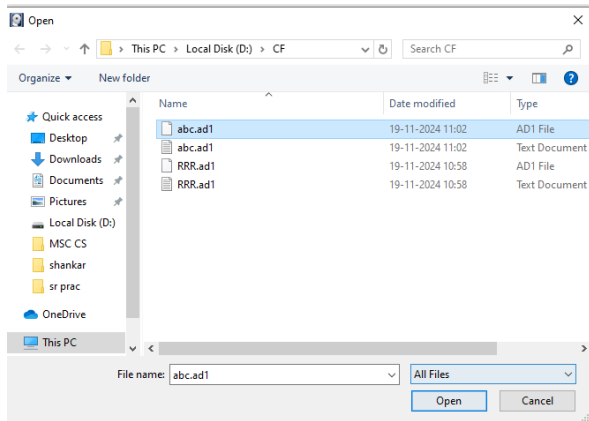
Step7: Select Add Evidence Item from File



Step8: Select Source as Image File



Step9: Select the File



CONCLUSION : ABOVE PROGRAM HAS SUCCESFULLY EXECUTED