Security And Forensics Lab - I

20th August 2024

Assignment - 4

1. Find out the detailed layout of the pen drive. Give details about the Reserved area, FAT area and Data area.

2. Find out what allocation strategy is being used by your operating system to store the file contents.

3. Find out the allocation strategy for metadata entries.

4. Suppose the allocation strategy for metadata entries is first available and the allocation strategy for the content category is next available. There are more than 500 clusters available for data storage in the pen drive.
Suppose the following sequence of changes happens in the pen drive.
a. Create file1.txt (1 cluster)
b. Create file2.txt (1 cluster)
c. Create file3.txt (2 clusters)
d. Delete file1.txt
e. Create file4.txt (2 clusters)
Will you be able to recover file1.txt? If yes, describe the steps. If not, explain why not.

5. Suppose you are working on a secret project and you want to hide the data from others except your group members. You don't want others to get suspicious about your activities in case they get hold of your pen drive.
In such a scenario, show two ways
where you can hide the data such that your file system does not get corrupt?
Also, explain the procedure to recover that data which you will follow in order to read that hidden data.