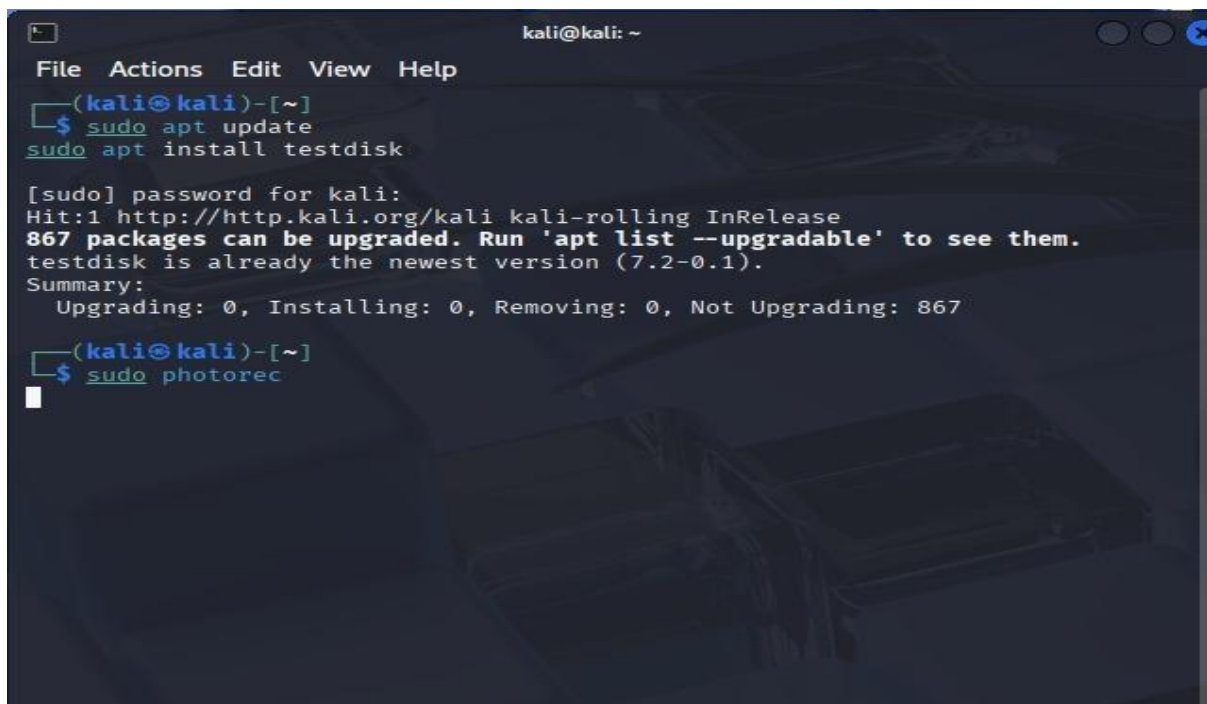# EXP NO:2 Recover deleted or damaged files from a storage device using Test Disk

AIM:

To recover deleted or damaged partitions and files from a storage device using **TestDisk**.

Procedure:

TestDisk is an open-source data recovery tool used to detect and repair lost or corrupted partitions. It analyzes disk structures, recovers deleted files, and restores damaged boot sectors. The tool helps rebuild partition tables and make lost data accessible again.

kali@kali: ~

File Actions Edit View Help

PhotoRec 7.2, Data Recovery Utility, February 2024
Christophe GRENIER <grenier@cgsecurity.org>
https://www.cgsecurity.org

   PhotoRec is free software, and
comes with ABSOLUTELY NO WARRANTY.

Select a media and choose 'Proceed' using arrow keys:
>Disk /dev/sda - 86 GB / 80 GiB (RO) - VMware Virtual S

>[Proceed]   [Quit]

Note:
Disk capacity must be correctly detected for a successful recovery.
If a disk listed above has an incorrect size, check HD jumper settings and BI
detection, and install the latest OS patches and disk drivers.

File   Actions   Edit   View   Help

PhotoRec 7.2, Data Recovery Utility, February 2024
Christophe GRENIER <grenier@cgsecurity.org>
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Disk /dev/sda - 86 GB / 80 GiB (RO) - VMware Virtual S

```
      Partition                 Start        End    Size in sectors
       No partition        0   0  1 10455 145 40  167968750 [Whole disk]
> 1 * Linux                 0  32 33 10455 145 40  167966702 [root]
```

>[Search]   [Options]   [File Opt]   [Quit]
                    Start file recovery

File   Actions   Edit   View   Help

PhotoRec 7.2, Data Recovery Utility, February 2024
Christophe GRENIER <grenier@cgsecurity.org>
https://www.cgsecurity.org

```
  1 * Linux                  0  32 33 10455 145 40  167966702 [root]
```

To recover lost files, PhotoRec needs to know the filesystem type where the
file were stored:
  [ext2/ext3] ext2/ext3/ext4 filesystem
>[Other   ] FAT/NTFS/HFS+/ReiserFS/ ...

PhotoRec 7.2, Data Recovery Utility, February 2024
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1 * Linux   0 32 33 10455 145 40 167966702 [root]

Please choose if all space needs to be analysed:
>[Free   ] Scan for file from ext2/ext3 unallocated space only
 [Whole   ] Extract files from whole partition

PhotoRec 7.2, Data Recovery Utility, February 2024

Please select a destination to save the recovered files to.
Do not choose to write the files to the same partition they were stored on.
Keys: **Arrow** keys to select another directory
      C when the destination is correct
      Q to quit
Directory /home/kali
>drwxr-xr-x 1000 1000   4096 27-Aug-2025 12:09 Documents
 drwxr-xr-x 1000 1000   4096 27-Aug-2025 12:09 Downloads
 drwxr-xr-x 1000 1000   4096 27-Aug-2025 12:09 Music
 drwxr-xr-x 1000 1000   4096 31-Aug-2025 00:09 Pictures
 drwxr-xr-x 1000 1000   4096 27-Aug-2025 12:09 Public
 drwxr-xr-x 1000 1000   4096 27-Aug-2025 12:09 Templates
 drwxr-xr-x 1000 1000   4096 27-Aug-2025 12:09 Videos
 drwxr-xr-x   0   0   20480 31-Aug-2025 00:02 recup_dir.1
 drwxr-xr-x   0   0   20480 31-Aug-2025 00:03 recup_dir.10
 drwxr-xr-x   0   0   20480 31-Aug-2025 00:03 recup_dir.100
 drwxr-xr-x   0   0   20480 31-Aug-2025 00:03 recup_dir.101
 drwxr-xr-x   0   0   20480 31-Aug-2025 00:03 recup_dir.102
 drwxr-xr-x   0   0   20480 31-Aug-2025 00:03 recup_dir.103
 drwxr-xr-x   0   0   20480 31-Aug-2025 00:03 recup_dir.104
 drwxr-xr-x   0   0   20480 31-Aug-2025 00:03 recup_dir.105
 drwxr-xr-x   0   0   20480 31-Aug-2025 00:03 recup_dir.106
 drwxr-xr-x   0   0   20480 31-Aug-2025 00:03 recup_dir.107
 drwxr-xr-x   0   0   20480 31-Aug-2025 00:03 recup_dir.108
 drwxr-xr-x   0   0   20480 31-Aug-2025 00:03 recup_dir.109
    Next

Result