## SHEET -6 - SPECIAL FILE PERMISSIONS

- 1. Use which cmd to check the where are its executable files
  - a. Which pwd
  - b. Which passwd
  - c. Which su
  - d. Which mount
  - e. Which gpasswd
- 2. List all the files having special permission 4 setuid
  - a. Find /usr/bin -type f -perm -4000
  - b. Use **find** to get all files with spl perm 2- setgid from /usr/bin
- 3. List all the directories having special permission 2 setgid from / directory (use find / -type d -perm -2000)
- 4. Run Is -I /usr/bin/gpasswd and observe the permission (-rws-r-x-r-x)
  - a. Run the same for passwd and sudo and chmod and observe.
  - b. Run Is -I /usr/bin/locate and observe the permission (-rwx--s--x)
  - c. Run Is -I /usr/bin/write and observe the permission (-rwxr-sr-x)
  - d. Run Is -Id /tmp and observe the permission (drwxrwxrwt)
- 5. Set up a directory, owned by the group sports. (setGID -4)
  - a. Members of the sports group should be able to create files in this directory.
  - b. All files created in this directory should be group-owned by the sports group.
    - i. Use (chmod g+s dir/filename) and also using octal values (chmod 2775 dir/filename)
  - c. Users should be able to delete only their own user-owned files.
  - d. Check if this works.
  - e. Try removing the permissions also and checking(chmod g-s dir.filename)
- 6. Create files and try setting and removing setuid permissions (setUID -2) and chk using Is -I filename
  - a. Chmod u+s filename
  - b. Chmod u-s filename
  - c. Chmod 4764 filename
  - d. Chmod 0764 filename
- 7. Become root user and create a shared full permission dir
  - a. Become user kevin and create files and dirs.
  - b. Login as another user and delete the files created by kevin
  - c. Now set sticky bit to the shared dir (chmod +t dirname) / chmod 1777 dirname)
  - d. Again, as kevin create dirs and files inside shared folder
  - e. Login as another user and delete the files created by kevin
  - f. Observe the changes.