1. Create a file and add executable permission to all users (user, group and others)

```
hanuman@hanuman-VMware-Virtual-Platform:~$ touch task1.txt
hanuman@hanuman-VMware-Virtual-Platform:~$ chmod a+x task1.txt
hanuman@hanuman-VMware-Virtual-Platform:~$ ls -l task1.txt
-rwxrwxr-x 1 hanuman hanuman 0 Jan 29 17:42 task1.txt
hanuman@hanuman-VMware-Virtual-Platform:~$
```

The rwxrwxr-x is the output where the x represents the this file has permission to all users

2. Create a file and remove write permission for group user alone.

```
hanuman@hanuman-VMware-Virtual-Platform:~$ touch task2.txt
hanuman@hanuman-VMware-Virtual-Platform:~$ chmod g-w task2.txt
hanuman@hanuman-VMware-Virtual-Platform:~$ ls -l task2.txt
-rw-r--r-- 1 hanuman hanuman 0 Jan 29 17:43 task2.txt
```

Here, x is not there, this represents that this file has removed the write permission for the group alone.

3. Create a file and add a softlink to the file in different directory (Eg : Create a file in dir1/dir2/file and create a softlink for file inside dir1)

```
hanuman@hanuman-VMware-Virtual-Platform:~$ mkdir -p dir1/dir2
touch dir1/dir2/file
ln -s dir2/file dir1/mysink
hanuman@hanuman-VMware-Virtual-Platform:~$ ls -l dir1/
total 4
drwxrwxr-x 2 hanuman hanuman 4096 Jan 29 17:44 dir2
lrwxrwxrwx 1 hanuman hanuman    9 Jan 29 17:44 mysink -> dir2/file
hanuman@hanuman-VMware-Virtual-Platform:~$
```

This creates a symbolic link (shortcut) in a parent directory that points to a file nested deep within subdirectories, allowing for easier access without navigating the full path.

4. Use ps command with options to display all active process running on the system

```
hanuman@hanuman-VMware-Virtual-Platform:~$ ps ux
USER         PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND
hanuman     1816  0.0  0.1  21196  2380 ?        Ss   16:04   0:01 /usr/lib/syst
hanuman     1817  0.0  0.0  21460   708 ?        S    16:04   0:00 (sd-pam)
hanuman     1827  0.2  0.3 117380  7044 ?        S<sl 16:04   0:14 /usr/bin/pipe
hanuman     1829  0.0  0.0  97736   792 ?        Ssl  16:04   0:00 /usr/bin/pipe
hanuman     1835  0.0  0.0  39132  1528 ?        Ss   16:04   0:00 /snap/snapd-d
hanuman     1838  0.0  0.2 406792  5372 ?        S<sl 16:04   0:01 /usr/bin/wire
hanuman     1839  0.1  0.6 128220 11940 ?        S<Lsl 16:04   0:07 /usr/bin/pip
hanuman     1840  0.0  0.1 316508  1968 ?        SLsl 16:04   0:00 /usr/bin/gnom
hanuman     1846  0.0  0.1  11116  2648 ?        Ss   16:04   0:02 /usr/bin/dbus
hanuman     1883  0.0  0.0 684024  1940 ?        Ssl  16:04   0:00 /usr/libexec/
hanuman     1887  0.0  0.0 309436  1764 ?        Ssl  16:04   0:00 /usr/libexec/
hanuman     1897  0.0  0.0 235668  1760 tty2     Ssl+ 16:04   0:00 /usr/libexec/
hanuman     1918  0.0  0.0 298236  1872 tty2     Sl+  16:04   0:00 /usr/libexec/
hanuman     1983  0.0  0.0 162652  1504 ?        Ssl  16:04   0:00 /usr/libexec/
```

This command scans the system's process table to list every program currently running, providing details like the Process ID (PID) and the user who started it.

5. Create 3 files in a dir1 and re-direct the output of list command with sorted by timestamp of the files to a file

```
mkdir -p dir1
touch dir1/a.txt dir1/b.txt dir1/c.txt
ls -lt dir1 > output.txt
hanuman@hanuman-VMware-Virtual-Platform:~$ cat output.txt
total 4
-rw-rw-r-- 1 hanuman hanuman    0 Jan 29 17:47 a.txt
-rw-rw-r-- 1 hanuman hanuman    0 Jan 29 17:47 b.txt
-rw-rw-r-- 1 hanuman hanuman    0 Jan 29 17:47 c.txt
lrwxrwxrwx 1 hanuman hanuman    9 Jan 29 17:44 mysink -> dir2/file
drwxrwxr-x 2 hanuman hanuman 4096 Jan 29 17:44 dir2
```

This captures a directory listing sorted by the most recent modification time and saves that specific output into a file instead of displaying it on the terminal screen.