**Name : Antuley Aman Siraj.**

**Roll No. : 23CO25.**

**Class : SE-CO**

**Batch : 01**

**Experiment - 01**

**Aim: Explore usage of basic Linux Commands and system calls for file, directory, and process management.**

1. **man**
   * **Displays the manual page for a specified command.**

Output:  
 aiktc@CO-LAB2-02:~$ man ls

1. **date**
   * **Displays the system date and time.**

Output:  
 Friday 24 January 2025 11:39:37 AM IST

1. **cal**
   * **Displays the calendar of the current month.**

Output:

January 2025

Su Mo Tu We Th Fr Sa

1 2 3 4

5 6 7 8 9 10 11

12 13 14 15 16 17 18

19 20 21 22 23 24 25

26 27 28 29 30 31

1. **w**
   * **Displays who is logged in and their current activities.**

Output:  
 15:37:46 up 18 min, 1 user, load average: 1.31, 1.80, 1.45

USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT

aiktc tty7 :0 08Sep22 504days 17.79s 0.20s mate-session

1. **whoami**
   * **Displays the current logged-in user's username.**

Output:  
 aiktc

1. **pwd (Print Working Directory)**
   * **Displays the full path of the current directory.**

Output:  
 /home/aiktc/23CO25

1. **ls**
   * **Lists the files and directories in the current directory.**

Output:  
 aiktc@CO-LAB2-02:~$ ls -l

-rw-r--r-- 1 aiktc aiktc 51666 Jan 5 2023 123.odt

-rw-rw-r-- 1 aiktc aiktc 4009 Dec 31 2022 1.html

1. **clear**
   * **Clears the terminal screen.**

Output:  
 Screen is cleared.

1. **cd (Change Directory)**
   * **Used to navigate between directories.**

Output:  
 aiktc@aiktc:~$ cd 23CO25

1. **mkdir**
   * **Creates a new directory.**

Output:  
 aiktc@CO-LAB2-02:~/Desktop/b1$ mkdir b11

1. **rmdir**
   * **Removes a directory.**

Output:  
 aiktc@CO-LAB2-02:~/Desktop$ rmdir b11

1. **rm**
   * **Removes (deletes) files.**

Output:  
 aiktc@CO-LAB2-02:~/Desktop$ rm 1.html

1. **printf**
   * **Creates a new file.**

Output:  
 aiktc@aiktc:~$ printf "Hello World" > aman1.txt

1. **gedit**
   * **Opens the Gedit text editor.**

Output:  
 Gedit window opens with file 6.txt.

1. **vi**
   * **Opens the Vi text editor.**

Output:  
 Vi editor opens.

1. **history**
   * **Displays a list of previously executed commands.**

Output:  
 aiktc@aiktc:~$ history

1. ls

2. cd Desktop

1. **mv**
   * **Moves or renames the file.**

Output:  
 aiktc@CO-LAB2-02:~/Desktop/b1$ mv 2.txt 1.txt

1. **chmod**
   * **Changes the access permissions for files and directories.**

Output:  
 aiktc@aiktc:~$ chmod 777 aman.c

1. **ping**
   * **Verifies connectivity with other devices.**

Output:  
 aiktc@aiktc:~$ ping -c 4 google.com

1. **grep**
   * **Searches for content within a file.**

Output:  
 aiktc@aiktc:~$ grep "Hello" aman.txt

1. **ps**
   * **Checks process status.**

Output:  
 aiktc@aiktc:~$ ps

1. **getpid**
   * **Returns process ID.**

Output:  
 aiktc@aiktc:~$ echo $$

1. **getuid**
   * **Returns the real user ID.**

Output:  
 aiktc@aiktc:~$ id -u

1. **getgid**
   * **Returns real group ID.**

Output:  
 aiktc@aiktc:~$ id -g

1. **sort**
   * **Prints the output in sorted order.**

Output:  
 aiktc@aiktc:~$ sort names.txt

1. **awk**
   * **Used for pattern scanning and processing.**

Output:  
 aiktc@aiktc:~$ awk '{print $1}' file.txt