

USP LAB
WEEK – 2

Agenda: File Systems

Questions

- 1) Write the directory structure of Unix File System.
- 2) Create three directories named **letters**, **reports** and **assignments** under your home directory.
- 3) Move to directory **letters**.
- 4) Create two directories named **friendly** and **formal** under the **letters** directory.
- 5) Move to directory **reports** using only one command (directly from **letters**).
- 6) Create three directories called **personal**, **business** and **school** under the directory **reports** (use only one command).
- 7) create a directory called **UNIX** under the **assignments** directory without moving from the **reports** directory.
- 8) Create two directories called **HWs** and **projects** under directory **UNIX**. The directories in this step should be created without moving from the **reports** directory.
- 9) Move to your home directory.
- 10) Recursively list all of the directories from the home directory and draw the directory structure on paper for the directories you have created just before.
- 11) Move to **HWs** directory
- 12) Check your current working directory
- 13) Create a file named **hw4** that contains some questions on Unix
- 14) Move to the home directory & View the contents of hw4 from your home directory
- 15) Ensure that the file you created is a regular file.
- 16) Make a copy of hw4 and call it **hw4.bk**. Store it under the same directory where hw4 is stored.
- 17) From your home directory, check to see if both files (hw4 and hw4.bk) exist.
- 18) Move to **HWs** Directory
- 19) Make the hard link to the **hw4** file called **hw4HL**.
- 20) Make a soft link to **hw4** called **hw4SL**.
- 21) Check the inode of **hw4**, **hw4.bk**, **hw4HL** and **hw4SL**. Are all the same? Are all different? Explain your answer.

- 22) Use the **ls** command to find the file types of **hw4**, **hw4.bk**, **hw4HL** and **hw4SL**.
Explain your observation.
- 23) Check the file type of **sda** and **tty** in **dev** directory
- 24) Create a character device **cdev** file under **device** directory with 7 as major number and 136 as minor number. Do this with superuser permission.
- 25) Create a character device **bdev** file under **device** directory with 1 as major number and 101 as minor number. Do this with superuser permission.
- 26) Ensure the type of **cdev** and **bdev**