Assignment-2, 17/10/2017

Sub: USP

Sub Code: 15CS35

Section A & B

SEM 3rd

1. Explain the different file types available in UNIX.
2. With the help of a neat diagram, explain the parent child relationship with respect to UNIX file system.
3. Explain the following with example:

i) HOME ii) PATH iii) Absolute path iv) Relative path v) . & ..

1. Explain cd, pwd, mkdir, rmdir commands with examples.
2. Explain briefly filename in UNIX.
3. Explain cat, mv, rm, cp wc commands with examples.
4. Explain the seven field output of ls –l command.
5. What are different ways of setting file permissions?
6. Explain how chmod command is used to change the file permissions in relative manner.
7. Explain how chmod command is used to change the file permissions in absolute manner.
8. Explain chmod recursively and directory permissions.

Table 1: **Abbreviations** used by chmod to change file permissions in relative manner (Q.No. 9)

|  |  |  |
| --- | --- | --- |
| Category | Operation | Permission |
| u 🡪 User | + 🡪Assign Permission | r 🡪Read Permission |
| g 🡪 Group | - 🡪Remove Permission | w🡪Write Permission |
| o 🡪 Others | = 🡪Assign absolute permission | x 🡪Execute Permission |
| a 🡪 All (ugo) |

Table 2: **Octal numbers** used by chmod to change file permissions in absolute manner (Q.No. 10)

|  |  |  |  |
| --- | --- | --- | --- |
| Binary | Octal | Permissions | Significance |
| 000 | 0 | --- | No Permissions |
| 001 | 1 | --x | Executable only |
| 010 | 2 | -w- | Writable only |
| 011 | 3 | -wx | Writable and Executable |
| 100 | 4 | r-- | Readable only |
| 101 | 5 | r-x | Readable and Executable |
| 110 | 6 | rw- | Readable and Writable |
| 111 | 7 | rwx | Readable, Writable and Executable |