

| **Branch/Semester** | BSc. IT (Cloud & Application Development) / II |
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| **Subject Name:** | Linux Essentials |
| **Subject Code:** | 05CA0205 |
| **Assignment:** | Assignment No. 3 (Linux File System and Structure) |
| **Date:** | 29th January 2025 |
| **Faculty Name:** | Prof. Abhishek Chauhan |

| **1.** | List directory contents using ls -l and understand permissions and ownership. |
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| **2.** | Create, copy, move, and delete files using touch, cp, mv, and rm. |
| **3.** | Create directories, navigate them, and remove them using mkdir and rmdir. |
| **4.** | Use ls -l to list file permissions and analyze the output. |
| **5.** | Change file permissions using chmod with symbolic and octal notations. |
| **6.** | Change file ownership using chown and group ownership using chgrp. |
| **7.** | Apply setuid, setgid, and sticky bit permissions on files/directories. |
| **8.** | Create soft and hard links using ln. |
| **9.** | Simulate common permission errors and resolve them using chmod and chown. |
| **10.** | Create a directory structure with files, set permissions for different users, and demonstrate file operations. |