

IP: 172.1.2.50

### USP Lab – Week 1

1. Execute the following commands in unix with different options and note down the output and comments.

1. ls
2. ps
3. cat
4. df
5. du
6. grep
7. find
8. gcc

2. Differentiate between internal and external commands of unix.
3. Write a C program to read from keyboard and display on monitor screen.
4. Write a C program to simulate copy command that copies contents of one file into another.
5. Write a C program to simulate a calculator reading the operation and operands from command line.
6. Differentiate between library functions and system calls with examples.
7. List out the different features of sh, bash, csh and tcsh shells.

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USP Lab – Week 2

8. Write a C program to read from standard input and display on standard output.
9. Write a program to read n characters from a file and append them back to the same file using dup2 function.
10. Write a program
  - a. to read first 20 characters from a file
  - b. seek to 10th byte from the beginning and display 20 characters from there
  - c. seek 10 bytes ahead from the current file offset and display 20 characters
  - d. display the file size
11. Write a program to display the file content in reverse order using lseek system call.