Tutorial No. 4

1. Write a short note on
   a. Read
   b. Write
   c. Close
   d. File creation
   e. Creation of special files
   f. Change directory
   g. Mount and umount
   h. link
2. List the system calls that returns the file descriptors for use in other system call? Explain any one in detail?
3. Draw the data structure of File system when following system calls are executed:
   a.

```
fd1 = open ("/etc/ passwd", 0_RDONLY);
fd2 = open ("local", 0_RDONLY);
fd1 = open ("/etc/ passwd", 0_RDONLY);
```

   b. Close(fd2)

4.

Consider the following program.

```
#include<fcntl.h>
Main ()
{
    int fd1, fd2;
    char buf 1[512],buf2[512];
    fd1=open("/etc/ passwd", O_RDONLY);
    fd2=open("/etc/ passwd", O_RDONLY);
    read(fd1, buf1, sizeof(buf1));
    read(fd2, buf2, sizeof(buf2));
}
```

Tutorial No. 4

With the help of above program explain how a process can open file more than once and read it via different file descriptors.

5. What are the pipes? Explain the algorithm “pipe” for creation of unnamed pipes.
6. Discuss the reading and writing the pipes