

## COMMAND SIMULATION

- **Using UNIX system calls, most commands can be emulated in a similar manner.**
- **Simulating a command and all of its options is an exhaustive exercise.**
- **Command simulation harnesses one's programming skills.**
- **Command simulation helps in development of standard routines to be customized to the application needs.**
- **Generally file I/O commands are simulated.**

### **Exp# 3a**

### **ls command**

#### **Aim**

To simulate ls command using UNIX system calls.

#### **Algorithm**

1. Store path of current working directory using `getcwd` system call.
2. Scan directory of the stored path using `scandir` system call and sort the resultant array of structure.
3. Display `dname` member for all entries if it is not a hidden file.
4. Stop.

#### **Result**

Thus the filenames/subdirectories are listed, similar to ls command.