**LAB Assignment 2**

Operating Systems (UCS-303)

1. Introduction of internal and external commands.

2. Feeding output of one command to another command by pipelining.

3. expr, locating command.

4. echo command.

5. Using . and ..

6. Ways for signing off from linux.

7. Ping, Man and help command.

8. Combining the commands.

9. File permissions and changing the access rights (chmod).

10. vi editor and its basics: write a small paragraph using vi editor.

Answer01:

INTERNAL COMMANDS

Commands that are executed by shell itself without invoking any external command, and are built in shell commands are called internal commands. Since, no external command is needed to invoked, they are compatibly faster than external cmds. Since they are shell commands, they need less resources to be executed along with this, they are always available to be used until the shell is running, such commands are used to operate the basic shell operations. Some examples are (cd, echo, pwd, set, history) etc. They don’t even need a path to be executed.

EXTERNAL COMMANDS

Commands that are not built in shell, rather exist as executable files. When we run external command, it use to find the PATH of executable file in environment variables to load it in memory and then execute it. External commands are standalone programs located in directories like /bin , /user/bin or /user/local/bin some examples include (ls, grep, cp, cat) etc…