

## **Network Programming - Shell Guide**

1. Shell works with all commands available in bash.  
"cd" is an shell builtin command to change directory.

```
→ Assignment-1 git:(master) X ./shell
Shell>ls
chat.c Makefile shell shell.c tcpclient.c test.c
Shell>pwd
/home/deepak/Code/NetProg/Network-Programming-Assignments/Assignment-1
Shell>cd ..
/home/deepak/Code/NetProg/Network-Programming-Assignments
Shell>
```

2. It has single piping, double piping and triple piping.  
Double and triple piping can be used only once and they should be the last pipe used.

```
Shell>ls | wc
      1      1     13
Shell>ls || wc,wc
      1      1     13
      1      1     13
Shell>ls ||| wc,cat,wc
      1      1     13
Assignment-1
      1      1     13
Shell>pwd
/home/deepak/Code/NetProg/Network-Programming-Assignments
Shell>
```

3. Shell has autocomplete on pressing "Tab". This will

```
Shell>pwd
/home/deepak/Code/NetProg/Network-Programming-Assignments
Shell>ls
Assignment-1
Shell>cd Assignment-1
```

```

Shell>pwd
/home/deepak/Code/NetProg/Network-Programming-Assignments
Shell>ls
Assignment-1
Shell>cd Ass

```

work for all files and directories present in current working directory. It will fill the first match it finds.

4. Shell has redirection operators '<', '>' and '>>'. '<' can be used only once in a command. Only one of '>' and '>>' can be used in a command. Piping and redirection cannot be used together.

```

Shell>ls
chat.c Makefile shell shell.c tcpclient.c test.c
Shell>cat Makefile
shell: shell.c
    gcc -o shell shell.c
Shell>cat < Makefile > output
Shell>ls
chat.c Makefile output shell shell.c tcpclient.c test.c
Shell>cat output
shell: shell.c
    gcc -o shell shell.c
Shell>cat < Makefile >> output
Shell>cat output
shell: shell.c
    gcc -o shell shell.c
shell: shell.c
    gcc -o shell shell.c
Shell>

```