

# Simple Shell In C

This is a simple shell which handles 10 commands, 5 internal and 5 external. This handles a simple command and at most two flags.

## INTERNAL COMMANDS

### 1. cd command:

options : cd <filename>

cd

cd ..

cd ~

cd -P <filename>

cd -L <filename>

Error handling: 1). Invalid path prompt when directories are not available.

2). Invalid option prompt when wrong flag is entered.

### 2. echo command:

options: echo <string>

echo -n <string>

echo -E <string>

*Assumptions: Only supports -n, -E and simple echo commands.*

### 3. history command:

options : history

history <integer number>

history -c

error handling: invalid command if invalid command is passed followed by history.

Assumptions: Positive integers should be passed.

This command will print the entire history when the simple history command is entered. If history is followed by an integer then last n command will be printed. To clear the history you just need to type history -c.

#### 4. pwd command :

options: pwd

pwd -P

pwd -L

Error handling: Invalid command if command passed is other than the given options.

It prints the current working directory.

#### 5. exit command:

options: exit

It will terminate the process and exit the shell.

### **EXTERNAL COMMANDS**

#### 1. ls command:

options: ls

ls -m

## ls -l

ls command prints the files and folders in the current working directory. The -m flag prints the separated with coma and the -l flag print the files and folders one per line.

## 2 mkdir command:

Options: mkdir <directory name> It creates new directory and give an error if not possible to make a directory.

mkdir -v <directoryname> It creates a directory and give a message of successful completion and give an error if not possible.

mkdir -m <file mode> <directoryname> It creates a file with the given mode in the command and give error if not possible

## 3 rm command:

Options:

rm <filename> deletes the file and give error if not possible.

rm -i <filename> ask user before deleting the file and give an error if not possible.

rm -r <directoryname> delete directory and give an error if not possible

## 4. Date command

Options: date displays the date in IST formate

date -R displays the date in gmt +0530

date -l displays the date in yyyy-mm-dd format

## 5. Cate command:

Options:

Cat <filename> prints the content of the file.

`cat -E <filename>` display \$ at end of each line.

*Cat -n <filename> displays number of the all lines of the file*