Document link : https://docs.google.com/document/d/1uXhn36gNyfjxTr1ZV7JM1caUfNoVflilFXY9dncgX3k/edit

Command explanation

Internal

cd

Options

-L : force symbolic links to be followed: resolve symbolic links in DIR after

processing instances of ..

–help: display the help manual and exits

Error handled

-if directory not present it shows “No such file/directory”

-if the flag is absent or wrong, it shows no such option or file is present

Assumption: home directory is the directory in which ./main is present

echo

Options

-n : omit the trailing newline character

-E : diable the interpretation of backslash escapes (default)

Error handled

-if no argument is passed then shows error that argument required

Assumption: double quotes of the string is directly handled

pwd

Options

-L : print the value of $PWD if it names the current working directory

-P : print the physical directory, without any symbolic links

–help: displays help and exit (implemented before professor’s email)

Error handled

-if option is not present then outputs option not found

External Commands

ls

Options

-a : show hidden files, which means shows filename starting with ‘.’

-m : comma separated names of files and folders

-1 : shows the name of folders and files as a vertical list

Error handled

-arguments are not enough or wrong arguments

cat

Options

-n : number all output lines

-E : display $ at the end of each line

Error handled: using fopen error library and errno.h header file

-file doesnot exist

-user doesn’t have access to the file

date

Options

-u : print the UTC time

–help: display help manual and exit(also implemented before sir’s mail)

rm

Options

-i : output promt as a warning before removing a file

–help : display the help abd exits

Errors:

-file does not exits

-given path is a directory

-user doesnnot have access to files

mkdir

Options

-v : print a message for each created directory

–help : display help and exits :(

Errors

- the named directory already exists

- readonly folder cannot have subfolders

- a component of path prefix cannot be a directory

Sources used

Cd : <https://man7.org/linux/man-pages/man1/cd.1p.html>

Echo : <https://man7.org/linux/man-pages/man1/echo.1.html>

Pwd : <https://man7.org/linux/man-pages/man1/pwd.1.html>

Ls: <https://man7.org/linux/man-pages/man1/ls.1.html>

Cat: <https://man7.org/linux/man-pages/man1/cat.1.html>

Date: <https://man7.org/linux/man-pages/man1/date.1.html>

rm:<https://man7.org/linux/man-pages/man1/rm.1.html>

Mkdir: <https://man7.org/linux/man-pages/man1/mkdir.1.html>

fork() and execvp :<http://www.cs.ecu.edu/karl/4630/sum01/example1.html>

Couldnt able to implement system() and pthread() due to arguement disputes

Some code snippet used from : <https://www.youtube.com/watch?v=VzCawLzITh0>

Code idea inspiration: <https://github.com/anshulforyou/linux_shell>

<https://github.com/Priyansh19077/Linux-Terminal-Clone>