**Final Simple Shell Implementation Documentation**

Features:

**Command Execution:** The shell can execute external commands entered by the user.

**Change Directory (cd) and Backtrack (cd ..):** It supports changing directories using the cd command. If cd is followed by .., it moves to the parent directory.

**Print Current Working Directory (pwd):** The pwd command prints the current working directory.

**Echo Command:** The echo command prints the arguments passed to it. It also supports redirection operators > and >> to write or append the output to a file.

**List Contents (ls):** The ls command lists the contents of the current directory.

**Create File (touch):** The touch command creates an empty file or updates the timestamp of an existing file.

**Basic Error Handling:** Error messages are displayed when commands fail.

$ ls

file1.txt file2.txt

$ cd /path/to/directory

$ pwd

/path/to/directory

$ echo Hello World

Hello World

$ echo Hello World > output.txt

$ echo Another Line >> output.txt

$ touch newfile.txt

$ ls

newfile.txt

**Feature Details:**

**Command Execution:**

The shell uses the fork() and execvp() functions to execute external commands entered by the user.

The fork() function creates a new process and execvp() replaces the current process with the desired command.

**Change Directory (cd) and Backtrack (cd ..):**

The cd command allows users to change directories.

Usage: cd [directory]

If cd is followed by .., it moves to the parent directory.

If no directory is provided, an error message is displayed.

**Print Current Working Directory (pwd):**

The pwd command prints the current working directory.

Usage: pwd

**Echo Command with Redirection:**

The echo command prints the arguments passed to it.

Usage: echo [arguments]

Supports > to write output to a file and >> to append output to a file.

Examples:

echo Hello World > output.txt (Overwrites output.txt with "Hello World")

echo Another Line >> output.txt (Appends "Another Line" to output.txt)

**List Contents (ls):**

The ls command lists the contents of the current directory.

Usage: ls

**Create File (touch):**

The touch command creates an empty file or updates the timestamp of an existing file.

Usage: touch [filename]

**Basic Error Handling:**

Error messages are displayed when commands fail.