Overview:

This is a small mock linux shell which can be run through a linux terminal. It parses user input to execute linux commands and a few built in commands. The implemented built in commands are as follows: cd, clr, dir, environ, echo and help.

MakeFile:

To compile the main.c file you will have to run the makefile included. To compile correctly make sure the makefile.sh / main.c / builtin.h / builtin.c files are all located in the same path location before executing makefile.sh. The compiler will return an executable file called MockShell

Builtin Commands:

cd

Takes in a path as the argument. If the directory exists it will change to the directory specified. Will also set the *PWD* environment variable to the current path.

clr

Clears the screen by printing a newline 60 times.

dir

Prints all of the directories and files in the current directory.

environ

Prints out the current environment variables for: LANG, PWD, USER, DESKTOP_SESSION, HOME, XDG_SESSION_TYPE, XDG_SESSION_DESKTOP, XDG_CURRENT_DESKTOP, SHELL, LOGNAME, and PATH.

echo

Takes in ARGS as a string and prints everything after the echo. Will be stopped by pipes and/or input or output redirection

help

Takes in an ARG that prints the help options for the built in commands created

Notes:

Figured out the problem with the pipe program waiting. Since I was creating two children in the same parent I had to add the wait() to the parent in the second child to correctly wait for both children processes to end.