

Assignment 0

The options which various commands can handle are:

ls : -r , -C

date: -R, -u

mkdir: --version , -v

rm: -i , -v

cat: -n, -E

history: -c , -r

echo: -e , -n

cd: . , ..

Exit and pwd has no options.

There are 5 internal commands which are implemented within shell.c and 5 external commands which have their separate files and are executed using fork, exec and wait.

The various corner cases handled in each command are:

1. Providing incorrect options to the shell
2. Starting double quotes before an argument but not ending it.
3. Specifically ls command also handles if you do not provide any directory to it.

4. The remove command can handle files which does not exist.
5. The cat command can also handle non-existing files.
6. Cd can handle directories if not present.
7. Implementation of history command is done using a file, so even if the program exits, we have the history data with us.

The test cases can be:

ls

ls ..

cd ..

cd <name of directory>

ls -r

ls -C

pwd

date

date -u

date -R

history

history -c

history

history -r histo.txt

rm <file not present>

rm -i <filename>

rm -v <filename>