

For my command I chose "ls -L"

This command lists the contents of the current directory. The -S flag sorts these items by size.

The reason I chose this command was that I download a lot of software and files to my computer for testing and experimenting with. I don't always delete them after I stop using them. I am also very careful about the organization of my computer. Being able to list items is really important to me and ls is one of my most used commands. Being able to sort items according to its size is a big plus for me since I can start cleaning from the files that matter the most.

For my process hierarchy I use 2 child's and the parent. First I change STD_OUT to the read part of my pipe. Then I create the first child which simulates the man ls command and outputs it to my pipe. I then change my STD_IN with the write end of my pipe. After that I open the "output.txt" file and change my STD_OUT to that file. After that I create my second child which executes the grep part of the command. After that is done I return back to my parent which was waiting for the child nodes to finish. The program returns STD_IN and STD_OUT to its original state and terminates.