

Lab 4

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Scenario 1 : Printing all the required files and directories.

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[punyajamishra@loki ~]$ cd tests
[punyajamishra@loki tests]$ ls
lab1 lab1.c lab2 lab2.c lab3 lab3.c midterm1 midterm1.c
[punyajamishra@loki tests]$ nano lab4.c
[punyajamishra@loki tests]$ gcc lab4.c -o lab4
[punyajamishra@loki tests]$ ls
lab1 lab1.c lab2 lab2.c lab3 lab3.c lab4 lab4.c midterm1 midterm1.c
[punyajamishra@loki tests]$ ./lab4

The doubly linked list :
root
alaadin.pdf
punyaja.docx
src
0660001.pdf[punyajamishra@loki tests]$
```

There were two methods to go about this lab :

1. When inserting into the doubly linked list, make a method that inserts based on the parent (so you insert the node and the next is null while the parent is previous
2. Make the files have a next point that is not null but points to the next file entered.
Both ways work, but I think method 1 is more robust.

I used method 2 for my program.

The methods take struct and inserts them into the linked list.

For identification whether it is a file struct or a dir struct, there is an int value ID that is 0 for folder and 1 for file.