Frontier Code 9am

- Set of arbitrary objects, that need to be ordered & sorted

- File read
  File write

- Implement comparable or use multiple lists

left sock → pants
pants → belt

left sock	pants

$\neq$ $=$

left sock	pants	belt

Suit jacket → left shoe

?
?

- tree

1 left sock CRLF
After:[] CRLF
Before:[pants] CRLF
CRLF

5 pants CRLF
After:[left sock, right sock, dress shirt] CRLF
Before:[belt, suit jacket] CRLF
CRLF

7 belt CRLF
After:[pants] CRLF
Before:[suit jacket] CRLF
CRLF

8 suit jacket CRLF
After:[t-shirt, dress shirt, tie, pants, belt] CRLF
Before:[left shoe, right shoe, overcoat, sun glasses] CRLF
CRLF

9 left shoe CRLF
After:[suit jacket] CRLF
Before:[overcoat] CRLF
CRLF

10 right shoe CRLF
After:[suit jacket] CRLF
Before:[overcoat] CRLF
CRLF

overcoat CRLF
After:[left shoe, right shoe, suit jacket] CRLF
Before:[] CRLF
CRLF

2 right sock CRLF
After:[] CRLF
Before:[pants] CRLF
CRLF

3 t-shirt CRLF
After:[] CRLF
Before:[suit jacket, dress shirt] CRLF
CRLF

4 dress shirt CRLF
After:[t-shirt] CRLF
Before:[pants, suit jacket, tie] CRLF
CRLF

6 tie CRLF
After:[dress shirt] CRLF
Before:[suit jacket] CRLF
CRLF

11 sun glasses CRLF
After:[suit jacket] CRLF
] CRLF
CR

overcoat CR
After:[sun glasses]
Before:[]

first pass (yellow)
second pass (pink)
third pass (blue)
fourth pass (orange)
fifth pass (green)
sixth pass (box)

① Left sock   Pants
  Before Pants   After left sock

② Left Sock   Pants
  Before Pants   After left sock,

1st pass
create all items in

(Print)   Search for items with
          null before to get #1

size = 0
left sock, right sock, tshirt . sort .print

~~everything after w left sock~~

left sock

↓

pants → after [sock Rsock dressshirt

remove   already printed↑   ↑   = dressshirt

belt → after pants

remove   already found

belt   before   suit jacket

↓
suit jacket → after tshirt dress shirt tie pants belt

remove

Print

1st anything that after.size = 0

  left sock, rightsock, t-shirt

size = 1

  belt, left shoe, right shoe, dress shirt

1 left sock → pants
2 pants → belt
3 suit jacket → left shoe
4 suit jacket → right shoe
5 left shoe → overcoat

~~t-shirt~~

6 right sock → pants
right shoe → overcoat
t-shirt → suit jacket ~~/~~
t-shirt → dress shirt ~~/~~
dress shirt → pants
dress shirt → suit jacket ~~//~~
tie → suit jacket ~~///~~
pants → suit jacket ~~/~~
belt → suit jacket
suit jacket → overcoat
dress shirt → tie
suit jacket → sunglasses
sunglasses → overcoat

printed
based → left sock, right sock, t-shirt
on   dress shirt
alphabetical   pants, tie
sort   belt
            suit jacket
            left shoe, right shoe, sunglasses
            overcoat

recurse
        Print reversed   start at overcoat find all
        dependants,

Ⓐ Left Sock
Ⓑ ~~Belt~~ Pants
Ⓒ Belt
Ⓓ Suit Jacket
Ⓔ Left Shoe
Ⓕ Right Shoe