

Remove Sub-Folders from the Filesystem:

→ Given: list of folders representing folders and subfolders.

If folder $[i]$ is located within another folder $[j]$

Empty strings and "/" are not valid strings.

Ans > Brute force:

Prefix matching

["/a", "/a/b", "/c/d", "/c/d/e", "/f"] - check for others

n to scan the input.

L length of Prefixes.

L^2 to compare prefixes.

} $O(n L^2)$ time

[Can be optimized with Heap

def function

folder set = set(folder)

res = []

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for f in folder:

res.append(f)

for i in range(len(f)):

if f[i] == "/" and f[:i] in folder-set:

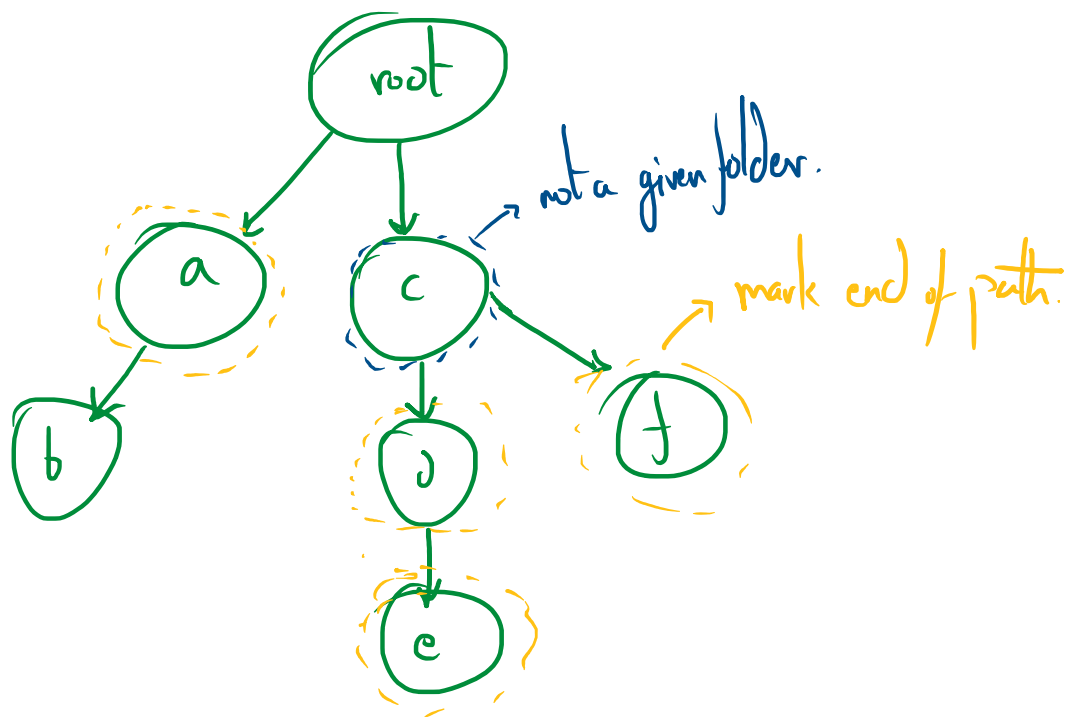
res.pop()

break

return res

Efficient Solution: Prefix Trees

["/a", "/a/b", "/c/d", "/c/d/e", "/c/f"]



Moderate Solution:

- sort the folder list alphabetically, bringing groups of subfolders immediately after their parent folder.
- A list to track non-subfolders. Add the first folder to the list.
- For each subsequent folder:
 - Check if it begins with the last folder in the result list plus a /.
 - If not, add it to the result list; otherwise, it is a subfolder and cannot be skipped.
- Return the result list as it only contains only non subfolders