

### Walkthrough of Code :

A directory is constructed of files and directories, nested within each other. These files and directories can represent a leaf and root node in a sense. A directory is constructed similar to the nature of a tree. Traversing a tree and directory are also similar, recursion if the child node is a directory, and append the file if it ends with the suffix.

### Time Complexity: $O(n)$

Given  $n$  is the files and directories in the directory or file given, the implementation is similar to a tree-traversal. However, the method can't single out a certain path in the directories. The time complexity would be the length of the directory or file given; it would have to iterate through every single file and directory.

### Space Complexity: $O(1)$

File recursion iterates through the directory and doesn't append references to individual directories, a constant space complexity.