

Course COMP-8567

Assignment 02

Due date: Oct/17/2022 (11:45 pm)

Marks: 50

Write a C program **extfind** , to search for files with specific extensions in a directory hierarchy.

- The first parameter of extfind is the absolute path of the directory/subdirectory
- The remaining parameter/s are the file extensions.

Example: `$ extfind /home/pranga/chapter4 txt c` should list all the .txt and .c files in /home/pranga/chapter4 , and also in all of the subdirectories (and their subdirectories if any) in chapter4. i.e the entire directory subtree with **/home/pranga/chapter4** as the root should be searched for .txt and .c files.

- It is mandatory to provide a valid absolute path as the first parameter to this program (else the program should print an appropriate error message to **standard error** and exit)
- In case the file extensions are not provided in the second and subsequent parameters, all the files in the sub-tree must be listed in the output.
- The extfind command/program should accept 0-10 file extensions.

Output: The absolute path names of all the files found must be printed by the program. If no files of the specified type are found, appropriate message/s must be printed.

Requirement: - You must use the **system call nftw()** that allows you to walk across a file tree. Please read the manual of nftw() before starting your assignment.

Submission: The assignment should be uploaded as a single C file onto Blackboard