Jan. 20, 2021

Instructor Dr. Alkhateeb

Lab 01

Date Week of January 18

**Part I**

Modify the C program given on slide 18, from lecture 1, to obtain a program, call it **findFile**, to find a file or a directory in the current directory. In particular, your program takes a ”file-name” as an argument.

Synopsis: findFile <file-name>

Call example:

**findFile lab01.c**: search for **lab01.c** in current directory.

If name is found, it prints a line with the name found followed by either “ this is a file” or ”this is a directory”. Hints:

* All system calls needed to solve this problem are in the example myLs.c, that we have seen in class.
* You can check the field d type to distinguish between a regular file and a directory.

if (dirp->d\_type == DT\_DIR) // true if a directory

* Ignore the two special directories **.** and **..**

**Part II**

Modify your program so that **findFile** finds a file or a directory in the current directory hierarchy (i.e., searches recursively in subdirectories).

Call example: **findFile lab01.c:** searches for **lab01.c** in current directory and all its subdirectories

Hint: use a separate function to search for file-name.

1