

Reid5.py Algorithm:

- I. Folder class initialization
 - A. Set up active instance
 - B. Set up main tree dictionary
- II. Print menu options
- III. Run selection based on menu choice
 - A. Add File
 1. Asks user for a filename
 - a) Does filename exist under active folder
 - If name does not exist, save file under active folder instance
 - If name exists, print error
 - B. Add Folder
 1. Asks user for the name of a folder to create
 2. Checks if folder exists in the main dictionary
 - a) If name does not exist, creates folder under active instance
 - b) If name does exist, print error
 - C. Select Folder
 1. Asks user what folder they would like to make active
 2. Checks if folder exists in the main dictionary
 - a) If folder exists, check if user is already in that folder
 - If user is in folder, print an error
 - If user is not in folder, make new folder active
 - b) If folder doesn't exist, print an error
 - D. Print Folder
 1. Recursively goes through the active folder, subfolders and files
 2. Calls the private `__count_files` method, using the `__len__` method to get a total count of files in the active and subfolders
 3. Uses the `__str__` method to format and display the directory tree, printing a count of files, then showing the files, and subfolders with appropriate indentation.

E. Exit

1. Exits the program