

Print Information Gaussian.py is designed to search for specific text within log files across a directory structure. Here's an explanation of its functionality:

1. The script defines a `search_string` function that searches for specified text in log files within a given folder. It can search from either the beginning or end of the file, as specified by the user.
2. User input is collected for:
 - The depth degree of subfolders to search
 - The text to search for in the log files
 - Whether to search from the beginning or end of the files
3. The `explore_directory` function recursively explores the directory structure up to the specified depth. This function implements the concept of "depth grade" as explained:
 - Depth grade 0: Searches in the immediate subfolders (e.g., `iXX/`)
 - Depth grade 1: Searches in the next level of subfolders (e.g., `iXX/iXX_X/`)
 - Depth grade 2: Searches in the third level of subfolders (e.g., `iXX/iXX_X/iXX_X_X/`)

The depth grade determines how deep the script will traverse the folder structure before searching for log files.

4. For each directory at the appropriate depth, the script calls the `search_string` function to search the log files.
5. Results are collected and written to a file named `"Search_Results.txt"` in the base directory. For each log file, it records either the found value or a message indicating that the search text was not found.
6. The script is designed to be flexible, allowing searches at various directory depths and from either the beginning or end of log files.
7. It includes error handling for cases where no log files are found in a directory.
8. The code is well-documented with comments and docstrings, explaining the purpose of each function and major code block.
9. The script also includes a citation request and author information, encouraging users to credit the original author when using or adapting the code.

This script is particularly useful for projects with complex directory structures, such as those involving the Seminario method, where log files need to be analyzed at specific folder depths.