Assignment 3: explain absolute and relative path.

Here's an explanation of absolute and relative paths that you can use for your assignment:

Absolute Path:

- An absolute path is a complete path that starts from the root directory (the top-most directory) and specifies the exact location of a file or directory.
- It includes all the directories and subdirectories leading to the file or directory.
- Absolute paths always start with a forward slash (/) or a drive letter (e.g., C:).
- Example: /Users/username/Documents/assignment.txt
- This path starts from the root directory (/) and specifies the exact location of the file assignment.txt in the Documents directory.

Relative Path:

- A relative path is a partial path that starts from the current working directory (the directory you are currently in) and specifies the location of a file or directory relative to the current directory.
- It does not include the root directory or the full path.
- Relative paths are dependent on the current directory.
- Example: documents/assignment.txt
- This path is relative to the current working directory. If the current directory is /Users/username, then the absolute path would be /Users/username/documents/assignment.txt.

Key differences:

- Absolute paths always start from the root directory (/).
- Relative paths start from the current working directory.
- Absolute paths are complete and unique, while relative paths are partial and dependent on the current directory.

When to use each:

- Use absolute paths when you need to specify a file or directory that is not in the current directory or when you want to ensure that the path is unambiguous.
- Use relative paths when you need to specify a file or directory that is in the current directory or a subdirectory, and you want to avoid specifying the full path.