1. To what does a relative path refer?

2. What does an absolute path start with your operating system?

3. What do the functions os.getcwd() and os.chdir() do?

4. What are the . and .. folders?

5. In C:\bacon\eggs\spam.txt, which part is the dir name, and which part is the base name?

6. What are the three “mode” arguments that can be passed to the open() function?

7. What happens if an existing file is opened in write mode?

8. How do you tell the difference between read() and readlines()?

9. What data structure does a shelf value resemble?

Answers:

1. A relative path refers to the location of a file or directory relative to the current working directory of the program or script that is accessing it.
2. An absolute path starts with the root directory of the operating system, such as C:\ on Windows or / on Unix-based systems.
3. The function `os.getcwd()` returns the current working directory of the program, while `os.chdir()` changes the current working directory to the specified path.
4. The `.` folder refers to the current directory, while the `..` folder refers to the parent directory.
5. In the path `C:\bacon\eggs\spam.txt`, the `C:\bacon\eggs` part is the directory name and `spam.txt` is the base name.
6. The three "mode" arguments that can be passed to the `open()` function are:
    - `'r'` for read mode, which is the default mode.
    - `'w'` for write mode, which overwrites the existing file or creates a new file if it doesn't exist.
    - `'a'` for append mode, which appends new data to the end of an existing file or creates a new file if it doesn't exist.
7. If an existing file is opened in write mode, its contents will be truncated and replaced with the new data being written to it.
8. The `read()` method reads the entire contents of a file and returns it as a single string, while the `readlines()` method reads the contents of a file line by line and returns them as a list of strings.
9. A shelf value resembles a dictionary-like object that stores key-value pairs in a file on disk. It allows the programmer to store and retrieve Python objects from disk, and is often used as a simple and persistent way to cache data between program runs.