1.To what does a relative path refer?

A relative path refers to the location of a file or directory relative to the current working directory. It doesn't start from the root directory but instead describes a path relative to where the script or program is executing.

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

An absolute path starts with the root directory of the file system on your operating system. In most cases, it's represented by a drive letter (e.g., "C:" on Windows) or the root directory (e.g., "/") on Unix-based systems

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

os.getcwd() returns the current working directory, which is the directory in which your Python script or program is currently executing. os.chdir(path) changes the current working directory to the specified path.

4. What are the . and .. folders?

In file systems, the "." (dot) refers to the current directory, and ".." (dot-dot) refers to the parent directory. They are used to navigate within the file system.

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

In the path "C:\bacon\eggs\spam.txt," the "C:\bacon\eggs" part is the directory name (dir name), and "spam.txt" is the base name. The directory name indicates the path to the directory containing the file, and the base name is the actual filename.

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

The three "mode" arguments that can be passed to the open() function are:

* + "r": Read mode. Opens a file for reading (default).
  + "w": Write mode. Opens a file for writing. If the file already exists, it's truncated. If it doesn't exist, a new file is created.
  + "a": Append mode. Opens a file for writing, but data is added to the end of the file without truncating the existing content.

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

If an existing file is opened in write mode ("w"), its content will be truncated, and the file will be empty. Be careful when using write mode with an existing file, as it can result in data loss.

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

The read() function reads the entire contents of a file as a single string, while readlines() reads the contents of a file line by line and returns them as a list of strings.

9. What data structure does a shelf value resemble?

A shelf value in Python resembles a dictionary. It's a persistent storage option provided by the shelve module that allows you to store key-value pairs, similar to how you would store data in a dictionary. Shelf values can be used to store and retrieve data across different program executions.