**1. To what does a relative path refer?**

Ans-A relative path refers to a file or directory's location relative to the current working directory of the program. It does not include the complete path starting from the root directory of the file system.

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

Ans-An absolute path starts with the root directory or drive letter on the operating system. In most systems, for example, Windows, an absolute path starts with a drive letter (e.g., C:) followed by the directory structure leading to the file or directory.

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

Ans-In Python, the os.getcwd() function returns the current working directory as a string. It retrieves the path of the directory from which the script is currently running.

The os.chdir(path) function is used to change the current working directory to the specified path.

**4. What are the . and .. folders?**

Ans-In file systems, the "." (dot) refers to the current directory, and ".." (dot dot) refers to the parent directory. They are used to navigate and reference directories relative to the current location.

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

Ans-In the file path ‘C:\bacon\eggs\spam.txt’, the directory name is ‘C:\bacon\eggs’, and the base name is ‘spam.txt’.

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

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

‘r’: Read mode, which allows reading of an existing file.

‘w’: Write mode, which allows writing to a new file or overwriting an existing file.

‘a’: Append mode, which allows appending to an existing file without overwriting its contents.

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

Ans-If an existing file is opened in write mode, the contents of the file are erased, and the file is truncated to zero bytes. This means that all the data in the file is lost, and any new data written to the file replaces the old data.

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

Ans-The read() method reads the entire contents of a file as a string, while the readlines() method reads the contents of a file line by line and returns a list of strings, with each string representing a single line in the file.

**9. What data structure does a shelf value resemble?**

Ans-A shelf value in Python resembles a dictionary data structure. It stores key-value pairs, where the keys are strings, and the values can be any Python object that can be pickled, such as lists, tuples, or dictionaries. However, unlike a regular dictionary, a shelf value is stored as a file on the disk, and its contents persist across multiple program runs.