Assignment-9

1. To what does a relative path refer?
   A relative path in Python refers to the location of a file or directory in relation to the current working directory of the Python script or the current module.

2. What does an absolute path start with your operating system?
   An absolute path starts with the root directory of the operating system.

   What do the functions os.getcwd() and os.chdir() do?
3. The os.getcwd() function returns the current working directory, which is the directory that the Python script is currently executing in.
   The os.chdir() function changes the current working directory to the directory specified as its argument.

   What are the . and .. folders?
4. The . folder represents the current working directory, which is the directory where the user is currently located.
   The .. folder represents the parent directory of the current working directory. It can be used to navigate to a file or directory in the parent directory.

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

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 in Python are:
   "r"-read mode
   "w"-write mode
   "a"-append mode

7. What happens if an existing file is opened in write mode?
   If an existing file is opened in write mode using the open() function in Python, the contents of the file will be deleted. After opening the file, if any write operation is performed, the new data will overwrite the old data in the file.

8. How do you tell the difference between read() and readlines()?
   read() reads the entire file as a single string, while readlines() reads the entire file and returns a list of strings where each string represents a line from the file.

9. What data structure does a shelf value resemble?
   A shelf value resembles a dictionary data structure. It allows us to store key-value pairs persistently to a file on disk.