1. To what does a relative path refer?

**Ans:-** In python, A relative path refers to a specified file or directory path relative to the current working directory of the python script. It specifies the location of a file or directory relative to the location of the python script that is being executed.

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

**Ans:-** An absolute file path is a file path that specifies the complete location of a file or directory in the file system, starting from the root directory of the operating system. The format of an absolute file path varies depending on the operating system being used.

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

**Ans:-** The ‘os.getcwd()’ and ‘os.chdir()’ functions are used to get and change the current working directory.

“os.getcwd()” function returns the current working directory of the python script that is being executed. The current working directory is the directory in the file system that the python script is currently working in.

“os.chdir()” function changes the current working directory to the specified directory.

4. What are the . and .. folders?

**Ans:-** In python, The dot “.” and double dot “..” folder represents the special directory names.

The dot “.” folder represents the current directory in the file system hierarchy.

The double dot “..” folder represents the parent directory of the current directory.

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 dir 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:-** In python, The “open()” function is used to open a file and returns a file object. The “open()” function accepts several arguments, including the mode argument, which specifies the way in which the file will be opened. There are three primary mode arguments:-

1. “r”:- This is the default mode and is used to open a file for reading. If the file does not exist, an error will be raised.
2. “w”:- This mode is used to open a file for writing. If the file already exists, It will be overwritten. If the file does not exist, a new file will be created.
3. “a”:- This mode is used to open a file for appending. If the file already exists, new data will be written at the end of the file. If the file does not exist, a new file will be created.

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

**Ans:-** If an existing file is opened in write mode in python using the open() function, the contents of the existing file will be truncated, erased, and the file will be treated as a new empty file.

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

**Ans:-** In python, both “read()” and “readlines()” methods are used to read data from a file object.

1. **read()**:- This method reads the entire content of the file object as a string. It takes an optional size argument, which specifies the number of bytes to be read. If the size argument is not provided ‘read()’ method read the entire file.
2. **readlines()**:- This method reads the entire contents of the file object as a list of strings, Where each line of the file becomes an element in the list. The lines are separated based on the newline character, which indicates an end of a line.

9. What data structure does a shelf value resemble?

**Ans:-**  In python, A shelf value resembles a dictionary-like object, that is implemented using a shelve module. A shelf is similar to a dictionary in that it stores key-value pairs, along with keys() and values() methods that work similarly to the dictionary methods of the same names. The shelve module uses the python pickle module to serialize the objects that are stored in the shelf, which means that the objects can be of any picklable data type such as strings, lists, dictionaries, and even custom classes.