1. To what does a relative path refer?
   Solution 1: Relative paths are relative to the current working directory.

2. What does an absolute path start with your operating system?
   Solution 2: Absolute path starts with the root folder, such as / or C:\.

3. What do the functions os.getcwd() and os.chdir() do?
   Solution 3: os.getcwd(): this function returns the current working directory
   os.chdir(): it changes the current working directory

4. What are the . and .. folders?
   Solution 4: The . folder is the current folder, and .. is the parent folder.

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

6. What are the three “mode” arguments that can be passed to the open() function?
   Solution 6: The string 'r' for read mode, 'w' for write mode, and 'a' for append mode.

7. What happens if an existing file is opened in write mode?
   Solution 7: An existing file opened in write mode is erased and completely overwritten.

8. How do you tell the difference between read() and readlines()?
   Solution 8:
   read() method returns the file’s entire contents as a single string value. In other words, read() reads the entire contents of the file into a string. We can also give read() an optional argument, which designates the number of characters to read from the file:

```
with open("test.txt", "r") as file:
    content = file.read(15)
    print(content)
```
   o/p: first line
   seco

   readlines(): method returns a list of strings, where each string is a line from the file’s contents. For example:

```
with open("test.txt", "r") as file:
    lines = file.readlines()
    print(lines)
```
   o/p: ['first line\n', 'second line\n', 'third line\n']

   Example of **readline()**:

```
with open("test.txt", "r") as file:
    line = file.readline()
    print(line)
```
   o/p: first line

9. What data structure does a shelf value resemble?
   Solution 9: A shelf value resembles a dictionary value; it has keys and values, along with keys() and values() methods that work similarly to the dictionary methods of the same names.