

PYTHON ASSIGNMENT 9

1. To what does a relative path refer?

A relative path in Python is a path that describes the location of a directory relative to the entry point where you run the Python script.

So let's say you run your Python code in `~/home/projects/example-project/app.py`.

This is the entry point where you run the top-level code of your python module and acts as the starting point for the relative path. A relative path usually starts with `/`, `./` or `../`.

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

An absolute path in Python is the full path starting from the root of the operating file system up until the working directory.

So let's say you run your Python code in `/Users/abc/home/projects/example-project/app.py`. This is the entry point where you run the top-level code of your python module.

Then this is the absolute path of your working directory `/Users/abc/home/projects/example-project/`.

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

The `os.chdir()` method changes the current working directory to a specific path.

Syntax: `os.chdir(path)`

The `os.getcwd()` function returns the current working directory.

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

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?

`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?

The string `'r'` for read mode, `'w'` for write mode, and `'a'` for append mode. If not provided, it defaults to `'r'` (open for reading in text mode).

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

To modify (write to) a file, you need to use the `write()` method. You have two ways to do it (append or write) based on the mode that you choose to open it with.

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

The read() will read the whole file at once and then print out the first characters that take up as many bytes as you specify in the parenthesis versus the readline() that will read and print out only the first characters that take up as many bytes as you specify in the parenthesis.

9. What data structure does a shelf value resemble?

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.