DATE
PAGE

"It is like a bridge between your computer and Python"

Importing os

Import os

(1) working with files and directories.

(a) get current working directory.
os.getcwd()

(b) change directory
os.chdir("C:\Users\yourname\Documents")

(c) list files in a dictionaries
os.listdir()

(d) Create a folder
os.mkdir("new_folder")

(e) Create nested folders
os.makedirs("projects/python/day1")

(f) Remove a file
os.remove("data.txt")

(g) Remove Empty folders.
os.rmdir("old_folder")

Real-life-analogy

" Run this code when i open this book directly not when it is open as module.

Why it is important

① make code usable.
② prevents unwanted execution.
③ used in projects, scripts, testing and modules.
④ industry standard Python practice.

Day-16
Exercise Create a python utility tool kit containing useful functions (Calculator and temp converter)

OS Module

The os module in python is a built in library that provide a functions with the operating system. It allows you to perform a wide variety of tasks, such as reading and writing files, interacting with the files system, and running system comm

DATE
PAGE

Ex
```
if os.path.exists("data.txt"):
    print("file found")
else:
    print("file not found")
```

(c) os.path.isfile() - is it a file?
os.path.isfile("data.txt")
↳ True if file
↳ false if folder

(d) os.path.isdir() - is it a folder?
os.path.isdir("images")
↳ True if directory.

(e) os.path.splitext() → split file name and extension

os.path.splitext("photo.jpg")

('photo', '.jpg')

Real use
```
name, ext = os.path.splitext("vedio.mp4")
print(ext)  #.mp4
```

Use in
- file organizers
- sorting file by type.

Problem statement
→ Scan a folder
→ Delete empty files.

② Path handling (Os.path)

A path tells your OS where the ~~Path~~ file or folder is located.

· Windows → C:\Users\Knsn\Documents\file

Problem

different OS use different Path style
Os.path fixed this automatically

① Os.path.join()

Path = "folder\" + "file.txt" ✗
↳ It sometime ~~B~~break on windows
~~Linux~~

Correct way

Path = os.path.join("folder", "file.txt")
Work on windows | linux | mac

Output: folder/file.txt

② Os.path.exist() - does it Exist?
Check if the file or folder exist

Os.path.exist("data.txt")
Return → True, False