

1. How do you distinguish between `shutil.copy()` and `shutil.copytree()`?

`shutil.copy()` is used to copy a single file from a source path to a destination path. `shutil.copytree()` is used to recursively copy an entire directory tree from a source to a destination.

2. What function is used to rename files??

`os.rename()` is used to rename files `shutil.move()` is used to move file to source and destination and rename it

3. What is the difference between the delete functions in the `send2trash` and `shutil` modules?

In `send2trash` module `send2trash()` function moves files to the recycle bin. In `shutil` module `os.remove()` function permanently deletes a single file, and `shutil.rmtree()` function permanently deletes an entire directory tree.

4. `ZipFile` objects have a `close()` method just like `File` objects' `close()` method. What `ZipFile` method is equivalent to `File` objects' `open()` method?

`zipfile.ZipFile()` is equivalent to `File` objects' `open()` method

5. Create a programme that searches a folder tree for files with a certain file extension (such as `.pdf` or `.jpg`). Copy these files from whatever location they are in to a new folder.

In [16]:

```
1 import os
2 import shutil
3
4 def copy_files_by_extension(source_folder, destination_folder, file_extension):
5     _, files = os.walk(source_folder)
6     for file in range(len(files)):
7         if str(files[file]).endswith(file_extension):
8             source_path = os.path.join(root, file)
9             destination_path = os.path.join(destination_folder, file)
10            shutil.copy2(source_path, destination_path)
11            print(f"Copied {file}")
12
13
14
15 source_folder = os.getcwd()
16 destination_folder = os.getcwd()
17
18 # here i am keeping source and destination same
19 file_extension = '.pdf'
20
21 copy_files_by_extension(source_folder, destination_folder, file_extension)
22
```