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

ANSWER.

- `shutil.copy()` is used to copy a single file.

- `shutil.copytree()` is used to recursively copy an entire directory tree.

2. What function is used to rename files?

ANSWER.

The function used to rename files in Python is `os.rename()`.

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

ANSWER.

- The `send2trash` module is used to send files and directories to the system's trash or recycle bin, providing a safe way to delete files and directories that allows for easy recovery.

- The `shutil` module provides functions for permanent deletion of files and directories, including `shutil.rmtree()` for recursively deleting directories and their contents.

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

ANSWER.

The equivalent method in `ZipFile` objects to `File` objects' `open()` method is `ZipFile()` itself.

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.

ANSWER.

import os

import shutil

def find\_and\_copy\_files(source\_folder, target\_folder, file\_extension):

if not os.path.exists(target\_folder):

os.makedirs(target\_folder)

for root, dirs, files in os.walk(source\_folder):

for file in files:

if file.endswith(file\_extension):

source\_file\_path = os.path.join(root, file)

target\_file\_path = os.path.join(target\_folder, file)

shutil.copy2(source\_file\_path, target\_file\_path)

print(f"Copied: {source\_file\_path} --> {target\_file\_path}")

find\_and\_copy\_files(source\_folder, target\_folder, file\_extension)