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

**Ans**: shutil.copy(): Copies a single file from source to destination.

shutil.copytree(): Copies an entire directory tree from source to destination, including all its files and subdirectories.

1. What function is used to rename files?

**Ans**: The os.rename() function is used to rename files. It renames the file or directory from the source to the destination.

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

**Ans**: send2trash: The send2trash module provides a cross-platform Pythonic interface to the platform's send-to-trash functionality, allowing you to send files or folders to the trash/recycle bin.

shutil: The shutil.rmtree() function is used to delete an entire directory tree including all its files and subdirectories.

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

**Ans**: The ZipFile method equivalent to File objects' open() method is ZipFile.open(name, mode='r', pwd=None, \*, force\_zip64=False). It opens a file inside the ZIP archive with the specified name and mode ('r' for read, 'w' for write).

1. 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.

**Ans**:

import os

import shutil

import glob

def copy\_files\_by\_extension(src\_folder, dest\_folder, file\_extension):

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

os.makedirs(dest\_folder)

pattern = os.path.join(src\_folder, f'\*.{file\_extension}')

files\_to\_copy = glob.glob(pattern)

for file\_path in files\_to\_copy:

shutil.copy(file\_path, dest\_folder)

source\_folder = '/path/to/source'

destination\_folder = '/path/to/destination'

file\_extension\_to\_copy = 'pdf'

copy\_files\_by\_extension(source\_folder, destination\_folder, file\_extension\_to\_copy)