**Assignment-10**

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

Ans: shutil.copy() and shutil.copytree() are both functions in the shutil module of Python's standard library, but they serve different purposes. shutil.copy() is used to copy a single file while shutil.copytree() is used to recursively copy a directory tree.

1. What function is used to rename files??

Ans: In Python's standard library, you can use the os.rename() function to rename files.

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

Ans: send2trash is useful when you want to give the user an option to recover deleted files, while shutil is useful for permanently deleting files and directories without the possibility of recovery.

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 equivalent method in ZipFile objects to File objects' open() method is the ZipFile() constructor. The ZipFile() constructor creates a new ZipFile object and opens the specified ZIP archive file for reading or writing.

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.

Ans: import os

import shutil

def copy\_files(source\_folder, dest\_folder, extension):

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

for file in files:

if file.endswith(extension):

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

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

shutil.copy(source\_file\_path, dest\_file\_path)

print(f"Copied {source\_file\_path} to {dest\_file\_path}")

# example usage

source\_folder = "/path/to/source/folder"

dest\_folder = "/path/to/destination/folder"

extension = ".pdf"

copy\_files(source\_folder, dest\_folder, extension)