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

**Ans:-** The “shutil.copy()” and “shutil.copytree()”, are python functions provided by the “shutil” module for copying files and directories.

The main difference between the two functions is that “shutil.copy()” is used to copy a single file, whereas “shutil.copytree()” is used to copy an entire directory tree.

2. What function is used to rename files??

**Ans:-** The ‘os’ module in python provides a function called the “rename()” function, which can be used to rename files or directories. This function takes two arguments, Src(source) and dest(destination)

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

**Ans:-** Both the “send2trash” and “shutil” methods in python provide functions to delete files or directories but there are some difference between them;-

1. The main difference between the “send2trash” and “shutil” modules is that the “send2trash” module moves the file or directory to the operating system’s trash or recycle bin, while the “shutil” module deletes the file or directory permanently.
2. The “send2trash” method allows you to recover the files or directories from the trash or recycle bin if you accidentally deleted something you didn't mean to. On the other hand, the “shutil()” module deletes files or directories permanently, which means you can not recover them once they have been deleted.

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 the ‘zipfile()’ module to the “open()” method of “file()” objects in python is the ‘zipfile()’ method.

The “zipfile()” method in the “zipfile()” module is used to open a ZIP archive and returns a ‘Zipfile’ object that can be used to read or write files within the archive. It takes the name of the ZIP archive file as its first argument and an optional mode parameter that specifies the mode in which the archive should be opened.

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 into a new folder.

**Ans:-** import os

import shutil

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

"""

Searches for files with a certain file extension in a folder tree

and copies them to a new folder.

"""

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

for file in files:

if file.endswith(extension):

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

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

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

# Example usage:

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

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

extension = ".pdf"

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