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

shutil.copy(src, dst): This function is used to copy a single file from the source (src) to the destination (dst). It takes two arguments: the source file path and the destination file path. The src argument specifies the path of the file to be copied, and the dst argument specifies the path where the copied file should be placed.

shutil.copytree(src, dst): This function is used to recursively copy an entire directory and its contents from the source (src) to the destination (dst). It takes two arguments: the source directory path and the destination directory path. The src argument specifies the path of the directory to be copied, and the dst argument specifies the path where the copied directory should be placed.

To summarize, shutil.copy() is used to copy a single file, while shutil.copytree() is used to copy an entire directory and its contents

2. What function is used to rename files??

To rename files in Python, you can use the os.rename() function from the os module. It is used to rename a file or directory. The os.rename() function takes two arguments: the current name of the file or directory, and the new name to be assigned.

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

send2trash module: The send2trash module provides a cross-platform function called send2trash() that moves files and directories to the operating system's trash or recycle bin instead of permanently deleting them. It provides a safer alternative to directly deleting files, as it allows for potential recovery of deleted items.

shutil module: The shutil module provides the shutil.rmtree() function, which is used to recursively delete a directory and its contents. It permanently deletes files and directories without the option of recovery from the operating system's trash or recycle bin.

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

The ZipFile method equivalent to the File object's open() method is ZipFile.open(). It is used to open a file within a ZIP archive 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.

import os

import shutil

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

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

for file in files:

if file.endswith(.pdf):

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

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

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

In this example, the search\_and\_copy\_files() function takes the source folder path, target folder path, and the desired file extension as arguments. It recursively walks through the folder tree using os.walk(), identifies files with the specified file extension using file.endswith(), and copies them to the target folder using shutil.copy2().