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

`shutil.copy()` is used to copy a single file from one location to another, while `shutil.copytree()` is used to copy an entire directory tree from one location to another.

2. What function is used to rename files??

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

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

The `send2trash` module sends files and folders to the operating system's trash or recycle bin, while the `shutil` module's `os.remove()` and `shutil.rmtree()` functions permanently delete files and folders without sending them to the 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 that is equivalent to the `File` object's `open()` method is `ZipFile()` itself, which is used to create a new ZipFile object.

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.

```python

import os

import shutil

# Set the folder to search and the new folder to copy files to

search\_folder = 'C:/MyFolder'

copy\_folder = 'C:/NewFolder'

# Set the file extension to search for

file\_extension = '.jpg'

# Walk through the folder tree and find files with the given extension

for foldername, subfolders, filenames in os.walk(search\_folder):

for filename in filenames:

if filename.endswith(file\_extension):

# Build the full path of the file and the new location to copy it to

file\_path = os.path.join(foldername, filename)

new\_path = os.path.join(copy\_folder, filename)

# Copy the file to the new folder

shutil.copy(file\_path, new\_path)

```

This program uses the `os.walk()` function to recursively search through the directory tree starting at `search\_folder`. It then checks each file in the tree to see if it has the desired file extension, and if so, copies it to the `copy\_folder`.