1. How do you distinguish between shutil.copy() and shutil.copytree()?  
**Answer:** shutil.copy() is used to copy a single file from one location to another. It takes two arguments: the path of the source file and the path of the destination file. For example, the following code snippet copies a file named file.txt from the directory source to the directory destination:

2. What function is used to rename files??

**Answer:** you can use the os.rename() function to rename files.

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

**Answer:** The send2trash module is a third-party module that sends files and folders to the operating system's trash or recycle bin instead of permanently deleting them. This means that if you accidentally delete a file or folder, you can still recover it from the trash or recycle bin.

the shutil module is part of the Python standard library and provides several functions for working with files and directories, including copying, moving, and deleting them. The shutil module provides three functions for deleting files and directories:

os.remove(): Deletes a single file.

os.rmdir(): Deletes an empty directory.

shutil.rmtree(): Deletes a directory and all its contents, including subdirectories and files.

4.ZipFile objects have a close() method just like File objects’ close() method. What ZipFile method is equivalent to File objects’ open() method?  
**Answer:** The equivalent method in ZipFile to the open() method in file objects is ZipFile().

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.  
**Answer:  
  
import os**

**import shutil**

**# Set the directory to search and the target directory to copy files to**

**search\_dir = "C:/path/to/search"**

**target\_dir = "C:/path/to/target"**

**# Set the file extension to search for**

**extension = ".pdf"**

**# Create the target directory if it does not exist**

**if not os.path.exists(target\_dir):**

**os.makedirs(target\_dir)**

**# Walk through the directory tree and copy matching files to the target directory**

**for dirpath, dirnames, filenames in os.walk(search\_dir):**

**for filename in filenames:**

**if filename.endswith(extension):**

**filepath = os.path.join(dirpath, filename)**

**shutil.copy(filepath, target\_dir)**

**print(f"Copied {filepath} to {target\_dir}")**