

## Assignment - 10

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

```
In [1]: # The shutil.copy() function will copy a single file,  
# while shutil.copytree() will copy an entire folder,  
# along with all its contents.
```

2. What function is used to rename files?

```
In [2]: # The shutil.move() function is used for renaming files,  
# as well as moving them.
```

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

```
In [3]: # The send2trash functions will move a file or folder to the recycle bin,  
# while shutil functions will permanently delete files and folders.
```

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

```
In [4]: # The zipfile.ZipFile() function is equivalent to the open() function;  
# the first argument is the filename, and the second argument is  
# the mode to open the ZIP file in (read, write, or append).
```

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.

```
In [5]: import os, shutil  
  
def selectiveCopy(folder, extensions, destFolder):  
    folder = os.path.abspath(folder)  
    destFolder = os.path.abspath(destFolder)  
    print('Looking in', folder, 'for files with extensions of', ', '.join(extensions))  
    for foldername, subfolders, filenames in os.walk(folder):  
        for filename in filenames:  
            name, extension = os.path.splitext(filename)  
            if extension in extensions:  
                fileAbsPath = foldername + os.path.sep + filename  
                print('Coping', fileAbsPath, 'to', destFolder)  
                shutil.copy(fileAbsPath, destFolder)  
  
extensions = ['.pdf', '.jpg']  
folder = 'ineuron'  
destFolder = 'Training'  
selectiveCopy(folder, extensions, destFolder)
```

Looking in C:\Users\Admin\ineuron for files with extensions of .pdf, .jpg