A study on the conversion of file names in the use of computers

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Article info	Abstract

Keywords:
Computer
Filename
Conversion
Method

In this paper, a study on the mass conversion of filenames under various conditions that has been raised as a difficult problem in the use of computers is described. This method can deal with the problem of converting filenames that cannot be solved with conventional methods in the fastest time possible.

This method consists of three main steps.

That is, it consists of the process of obtaining the file name, the process of converting the file name according to the required request using the file name conversion formula in EXCEL, and the process of finally converting the file using the converted file name according to the conversion formula. This method is much easier than the previously described conversion method and has the advantage that it can be operated without error on any computer, providing a new premise in future research for data processing in computers.

1. Introduction

Computers are inseparable companions from our business and life. In particular, scientists and researchers use computers to solve problems raised in science and technology. There are some things to update data while the use of a computer, and here, the basics are so often when the names of files need to be renamed to be convenient for them. Of course, one or two or dozens of files can be specified and converted using a one-to-one method.

But how much time and energy would it take to convert hundreds or tens of thousands or even tens of millions of files? Also, if you work in a hurry, sometimes it can be mistakenly converted to a different name due to mistakes.

In general, people find this task very difficult.

Research has been conducted to make file conversion easier among computer users to solve this problem. In literature [1], one method for file conversion is described. Specifically, it is as follows.

Step 1: The process of getting the file name.

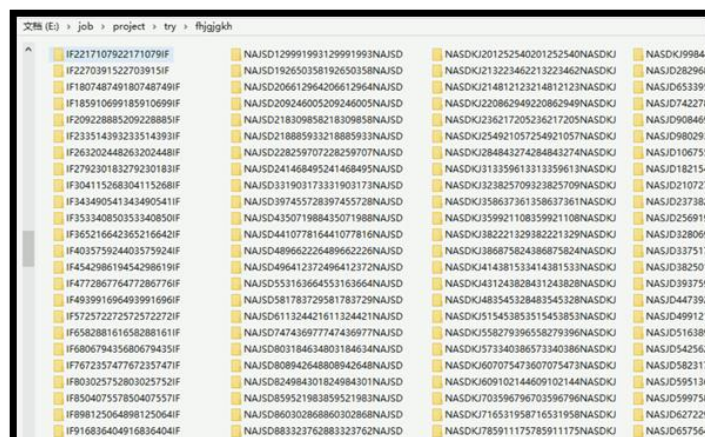Open the folder where you need to rename the file.

Figure 1. Open the register with the files you want to convert

Create a Notepad literature in the folder containing the files you want to convert to get the names of the files in the EXCEL table. Open the Notepad literature and click DIR *. * / B> Enter LIST.csv and save.
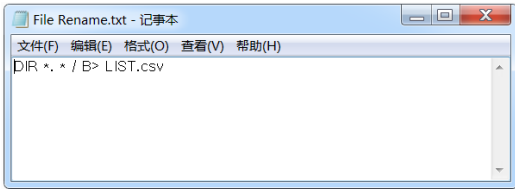

Figure 2. Create Notepad literature in the register with the files you want to convert

Convert the txt file format of the created Notepad literature to bat file format and save. To change it, double-click the created Notepad literature, change the file extension to bat, and click Yes in the confirmation window that appears.
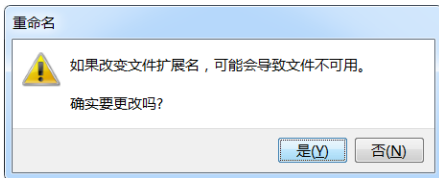

Figure 3. Change txt file format of Notepad literature to bat file format

If the file extension does not appear, select the file name to appear in the file contents edit window of the folder.
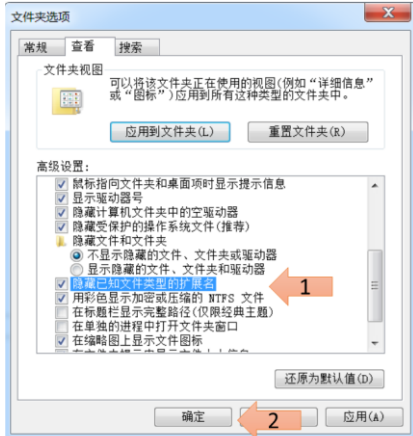

Figure 4. How to make the file extension appear

If you double-click the modified bat-type Notepad literature file, a CSV file with the file names of all files in the current folder is created.

Step 2: The process of converting the file name

Figure 5. Steps to edit the file name

Open the LIST.csv file in Excel. On the first line, delete the filename line of the just executed bat file, add a column before this column, and fill it with ren. Write the name of each file to be changed in the column after the folder name.

Step 3: the process of converting files

Create a new txt file in the current folder, copy all three data columns in CSV to the newly created txt file, and paste a large blank between the columns. Save the file with a space of one character and change the file extension to bat.
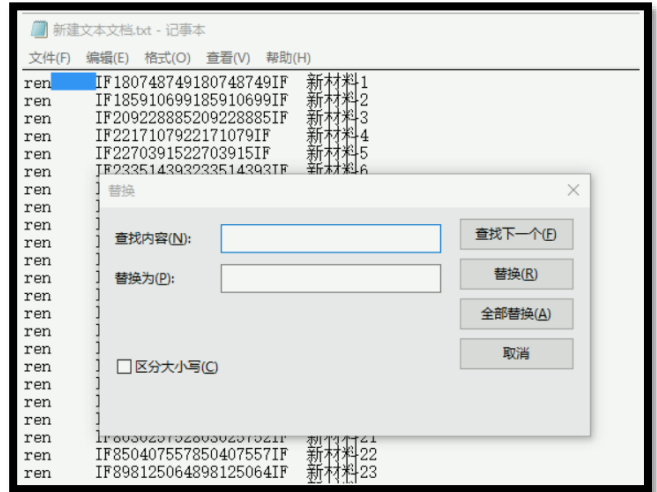

Figure 6. Copy all three data lines to the newly created txt file

Lastly, double-click the newly created bat file to collectively change the file name. Finally, delete the unnecessary 2 bat files and 1 CSV file to complete the task.
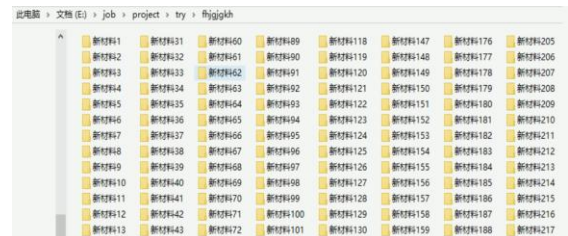

Figure 7. Converted file name

In literature [2], a method for converting files by writing a program is described. The method described in the literature is that all irregular files to be converted are picture files, and these files are converted into picture1, picture2...pictureN.

Specifically, it is as follows.

As in literature [1], open the register with the picture files to be converted and create a Notepad literature here. Open the Notepad literature and enter the following program code.

```
set a=1
setlocal EnableDelayedExpansion
FOR /f "tokens=*" %%i IN ('dir /a:d /b') DO (
set /A a+=1
ren "%%i" "picture!a!"
)
```

If you close the next Notepad literature and convert the extension format to bat and click twice, all irregular files are picture1, picture2,… It is converted in the order of pictureN.

You can rename the picture of ren "%%i" "picture!a!" in the program code to suit your needs.

For example, if the file is a Word literature, you can modify the code as follows.

```
set a=1
setlocal EnableDelayedExpansion
FOR /f "tokens=*" %%i IN ('dir /a:d /b') DO (
set /A a+=1
ren "%%i" "Word!a!"
)
```

In the literature [3], the file name to be converted was obtained using the same method as in the literature [1], and the following code was used in EXCEL. Place the original file name in column 1 of EXCEL and the file name to be converted in column 2

Figure 8. Arrangement of filenames

In column 3, the following code is described.
"ren """&A2&""" "&B2。

Figure 9. Describe the code

If you drag the coded item down, it looks like this:

Figure 10. Displayed change official name column

Finally, copy this modified official name column, copy it to Notepad, and save it by changing the extension to bat.

If you double-click the next bat-type Notepad literature, all file names in the register are converted. These methods are meaningful as methods to make data management convenient for users, but all have flaws. The method suggested in the literature [1] uses a method such as saving and extension conversion after writing Notepad literature and inserting the code for the first step of obtaining a file name. This is a very complex problem for general users. Also, the step of modifying the file name in Excel is very tricky as seen above. Also, after copying the modified file contents to Notepad, you must perform various manipulations to convert the file. In the literature [2], the method of inserting the program code into the Notepad is relatively simple but only used to change the file name of the same type in a certain order if there is a code. If users can't remember the program code, that's also a problem. Literature [3] is almost the same as the first step to obtain the file name as literature [1]. However, since the revision step of the file name in Excel is different, various operations of the Notepad can be reduced in the last step of the file conversion. However, the fundamental flaws of the method presented in

the literature [1] could not be resolved. It is a significant issue to find a method that is easy for general computer users to remember and write through consideration of the file conversion methods mentioned in the above literatures. From this problem, this paper proposes a method for converting the file name of an irregular file in a very short time using a simpler method.

2. Conversion method

As described above, there are three major steps to convert the file name: the process of obtaining the file name, the process of converting the file name according to the required request using the file name conversion formula in EXCEL, and the converted file according to the conversion formula. It includes the process of finally converting the file using the name. In the above literatures, these three processes are very complex, but a simpler method is described in this paper.

Step 1: The process of getting the file name.

Specifically, copy the path address in the folder containing the files you want to convert, put it in the address field of the browser, and press Enter. Then, the file names in the folder appear in the browser. Copy this and paste it on the EXCEL.

This eliminates the need for complicated processes like writing Notepad literatureation to get the filenames.
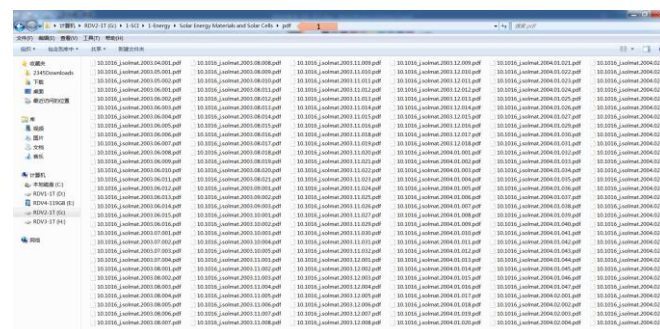

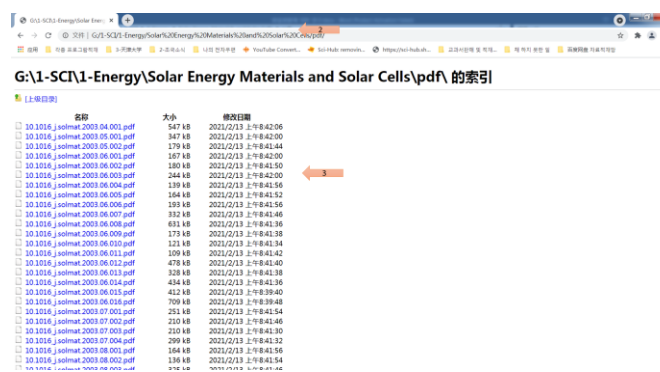Figure 11. Copy the path address in the folder where the files to be converted are located

Figure 12. The file name in the folder displayed in the browser

Step 2: The process of converting the file name

The same as in literature [3]. However, since it is necessary to convert not only the name but also the file format, one more format conversion column has been added.

At this time, the following code is described in column 4.

OLD File	NEW File	TYPE	Formular
10.1016_j.solmat.2003.04.001.pdf	1	.pdf	="ren """&A2&""" """&B2&C2&"""

Figure 13. Describe the code

If you drag the coded item down, it looks like this:

OLD File	NEW File	TYPE	Formular
10.1016_j.solmat.2003.04.001.pdf	1	.pdf	ren "10.1016_j.solmat.2003.04.001.pdf" "1.pdf"
10.1016_j.solmat.2003.05.001.pdf	2	.pdf	ren "10.1016_j.solmat.2003.05.001.pdf" "2.pdf"
10.1016_j.solmat.2003.05.002.pdf	3	.pdf	ren "10.1016_j.solmat.2003.05.002.pdf" "3.pdf"
10.1016_j.solmat.2003.06.001.pdf	4	.pdf	ren "10.1016_j.solmat.2003.06.001.pdf" "4.pdf"
10.1016_j.solmat.2003.06.002.pdf	5	.pdf	ren "10.1016_j.solmat.2003.06.002.pdf" "5.pdf"
10.1016_j.solmat.2003.06.003.pdf	6	.pdf	ren "10.1016_j.solmat.2003.06.003.pdf" "6.pdf"
10.1016_j.solmat.2003.06.004.pdf	7	.pdf	ren "10.1016_j.solmat.2003.06.004.pdf" "7.pdf"
10.1016_j.solmat.2003.06.005.pdf	8	.pdf	ren "10.1016_j.solmat.2003.06.005.pdf" "8.pdf"
10.1016_j.solmat.2003.06.006.pdf	9	.pdf	ren "10.1016_j.solmat.2003.06.006.pdf" "9.pdf"
10.1016_j.solmat.2003.06.007.pdf	10	.pdf	ren "10.1016_j.solmat.2003.06.007.pdf" "10.pdf"
10.1016_j.solmat.2003.06.008.pdf	11	.pdf	ren "10.1016_j.solmat.2003.06.008.pdf" "11.pdf"
10.1016_j.solmat.2003.06.009.pdf	12	.pdf	ren "10.1016_j.solmat.2003.06.009.pdf" "12.pdf"
10.1016_j.solmat.2003.06.010.pdf	13	.pdf	ren "10.1016_j.solmat.2003.06.010.pdf" "13.pdf"
10.1016_j.solmat.2003.06.011.pdf	14	.pdf	ren "10.1016_j.solmat.2003.06.011.pdf" "14.pdf"
10.1016_j.solmat.2003.06.012.pdf	15	.pdf	ren "10.1016_j.solmat.2003.06.012.pdf" "15.pdf"
10.1016_j.solmat.2003.06.013.pdf	16	.pdf	ren "10.1016_j.solmat.2003.06.013.pdf" "16.pdf"
10.1016_j.solmat.2003.06.014.pdf	17	.pdf	ren "10.1016_j.solmat.2003.06.014.pdf" "17.pdf"
10.1016_j.solmat.2003.06.015.pdf	18	.pdf	ren "10.1016_j.solmat.2003.06.015.pdf" "18.pdf"
10.1016_j.solmat.2003.06.016.pdf	19	.pdf	ren "10.1016_j.solmat.2003.06.016.pdf" "19.pdf"
10.1016_j.solmat.2003.07.001.pdf	20	.pdf	ren "10.1016_j.solmat.2003.07.001.pdf" "20.pdf"
10.1016_j.solmat.2003.07.002.pdf	21	.pdf	ren "10.1016_j.solmat.2003.07.002.pdf" "21.pdf"
10.1016_j.solmat.2003.07.003.pdf	22	.pdf	ren "10.1016_j.solmat.2003.07.003.pdf" "22.pdf"
10.1016_j.solmat.2003.07.004.pdf	23	.pdf	ren "10.1016_j.solmat.2003.07.004.pdf" "23.pdf"
10.1016_j.solmat.2003.08.001.pdf	24	.pdf	ren "10.1016_j.solmat.2003.08.001.pdf" "24.pdf"
10.1016_j.solmat.2003.08.002.pdf	25	.pdf	ren "10.1016_j.solmat.2003.08.002.pdf" "25.pdf"
10.1016_j.solmat.2003.08.003.pdf	26	.pdf	ren "10.1016_j.solmat.2003.08.003.pdf" "26.pdf"

Figure 14. Dragged interface

This way, any file can be converted to any file name and file type.

The important thing here is to first create another work window that does not have an official window, put the file name first, select only the files necessary for conversion here, and paste it using the paste method Value in the basic window with the formula.

Otherwise, the file name may change when you put it in the main window.

It is advantageous if you make a standard literature for EXCEL conversion and do a good job.

Step 3: the process of converting files

Enter 《cmd》 in the path address of the folder where the file to be converted is located and press Enter to display the DOS command waiting status window. Copy and paste the change official name of EXCEL here.
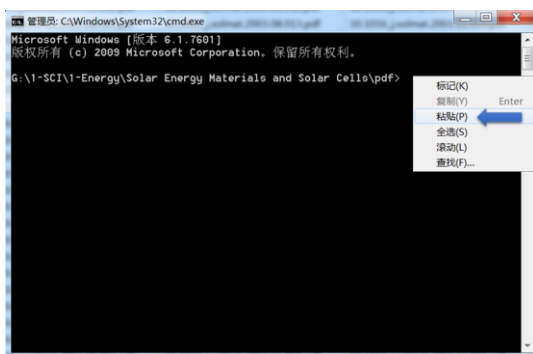

Figure 15. DOS command waiting status window

Then, even tens of thousands of files will be renamed in an instant.

3. Comparative analysis

The proposed method has the following advantages over the previous method. First, there is no need for a complicated literature processing process in the process of obtaining the file name. Second, any file format can be converted to suit the user's needs. Third, the process of converting files is very simple. As described above, the file conversion method described in this paper does not need a complicated process and is a method that can be easily understood and used by general users, and thus can be widely used in the rational use of computers. Through this file conversion method, not only scientists and engineers, but also general users can freely convert files using computers, create literature such as reports, and calculate data using EXCEL.

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