
Subject: My final solution..thanks for your help!
Posted by [m.doyle](#) on Tue, 13 Jan 2004 14:17:54 GMT
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Hello everyone, and many, many thanks for all your helpful suggestions.

I managed to get the runtime for this problem down to 35 seconds, from what I previously estimated was going to take about 4 days using for and if loops! Good old IDL!

I ended up combining many of the solutions posted previously, as follows;

My original files were in the format below:

```
> file1:
> 1954 12 31 23 90 11 4 366 0.00
>
> file2:
> 1954 12 31 23 2.80 2.10 2.20 95.21
```

With the intended result:

```
> 1954 12 31 23 90 11 4 366 0.00 2.80 2.10 2.20 95.21
```

I used Ben's suggestion and concatenated the first 4 columns of each file resulting in a "field ID" if you like:

```
> file1_ID= (file1[0,]*1000000D) + (file1[1,]*10000D) +
(file1[2,]*100D) + >file1[3,]
> file1_ID_final = round([file1_ID])
```

result: 1954123123

I then used the match() routine from the NASA library:

<http://groups.google.co.uk/groups?selm=331C553A.41C67EA6%40aistrosun.tn.cornell.edu&oe=UTF-8&output=gplain>

This program allowed me to output 2 vectors of indices indicating matching pairs of "field ID's". These outputs were suba for file1 and subb for file2. For example, if suba[0] = 2 and subb[0] = 5, then file1_ID[2] EQ file2_ID[5].

I then concatenated the 2 files based on these indices;

```
> endresult = [file1(*,suba(*)), file2(4,subb(*)),file2(5,subb(*)),
file2(6,subb(*)), file2(7,subb(*))]
```

and output!

> printf, 3, endresult, format = finalformat

Once again, many thanks for all your helpful suggestions,

Best wishes,

Martin..

m.doyle@uea.ac.uk (Martin Doyle) wrote in message
news:<d33d6a4b.0401080227.1a588e88@posting.google.com>...

> Hello all,

>

> I really hope someone out there can help me with this....I am tearing
> my hair out as my code is so slow!

>

> I have 2 files of data (hourly met data) with one file containing one
> set of parameters, and the other file containing another set of
> parameters. What I am trying to do, is to match the data based on the
> YY, MM, DD and HH values and then write BOTH sets of parameters to a
> seperate file. For example;

>

> file1:

> 1954 12 31 23 90 11 4 366 0.00

>

> file2:

> 1954 12 31 23 2.80 2.10 2.20 95.21

>

> intended result:

> 1954 12 31 23 90 11 4 366 0.00 2.80 2.10 2.20
> 95.21

>

> NOTE: Both files have no order to them, so a simple concatenation
> won't work

>

> I have written some code, but it is wrist slashing-ly slow!;

>

> I read in each variable as a seperate array...

>

> b=0L

> REPEAT BEGIN

> c=0L

> REPEAT BEGIN

> If (year(b) EQ year2(c)) AND (month(b) EQ month2(c)) AND (day(b) EQ

```
> day2(c)) AND (hour(b) EQ hour2(c)) THEN BEGIN
>
> printf, 3, year(b), month(b), day(b), hour(b), winddir(b), windsp(b),$
> present(b),visib(b), mslpres(b), airt(c), dewt(c), wett(c), relh(c),$
> format = finalformat
> endif
>
> c=c+1
>
> ENDREP UNTIL c EQ lines2-1
>
> b=b+1
>
> ENDREP UNTIL b EQ lines1-1
>
> I'm sure there must be a better way than this.
>
> Please help me!
>
> Many thanks in advance, Martin..
```
