Subject: Selecting odd/even numbered files
Posted by Irene Dumkow on Wed, 03 Apr 2002 12:26:40 GMT
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I have been writing an IDL routine to plot some of our data in a certain way. The measuring programm saves the data using a given prefix, adding a number starting from 001 until the user stops the measurement (eq xxxxx001.ext to xxxxx323.ext). The measuring program can do different kinds of measurements, but it will save the datafiles all in one directory. But for the data-plotting, I sometimes only want to select the odd or even numbers (for a start, the most ideal case would be to give a starting value and an increment). I have been using dialog_pickfile() for the fileselection, which is not suited for the task on hand. I was wondering if somebody has written a routine which does something like I want (selecting only even numbered or only odd numbered files) or can give me some ideas, because I am completely stumped on even how to get started.

Thanks in advance

Irene

Subject: Re: Selecting odd/even numbered files
Posted by David Fanning on Wed, 03 Apr 2002 20:06:14 GMT
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Wayne Landsman (landsman@mpb.gsfc.nasa.gov) writes:

> A minor footnote to the little program: In IDL V5.3 or later, the 5 lines
>
> numbers = IntArr(N_Elements(files))
> FOR j=0,N_Elements(files)-1 DO BEGIN
> stringpart = StrMid(files[j], 5, 3)
> numbers[j] = Fix(stringpart)
> ENDFOR
>
> can be replaced by the single vectorized line:
>
> numbers = fix(strmid(files,5,3))

Humm. That is what I wrote originally, but I kept getting the wrong thing. I had already wasted too much time on this, so I didn't follow up to see *why* it didn't work. I was expecting an array of 4 elements, and the numbers kept coming out as 4x4 arrays. :-(

Of course, now I substitute this in my code and it

works perfectly. :-(

I think what I was doing in my original code (before
I cleaned it up to send to the newsgroup, and yes I
know I could have cleaned it up even more) was trying
to make it even more general. I had something like this:

```
  slen = StrLen(files)

  IF Keyword_Set(even) THEN BEGIN
    numbers = fix(strmid(files,slen-5,3))
    index = Where(numbers MOD 2 EQ 0, count)
    IF count GT 0 THEN RETURN, files[index] ELSE RETURN, ""
  ENDIF
```

where I was trying to use the slen array to select a different
length for each possible filename (assuming they weren't
all the same length, but that they all had 3 character
extensions). In that case, the numbers variable kept
coming out as a 4x4 element array, rather than the expected
4-element array.

So, although these things have been made *slightly*
more vectorizable (is that a word?), they are not
totally there yet.

Cheers,

David

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