On Tuesday, July 18, 2017 at 7:12:18 AM UTC-6, thtr...@gmail.com wrote:
> Hello everybody,
>
> I need to write my data to a bunch of different files, ideally with 'consecutive' names, such as
File 1, File 2, File 3, .. so on (up to thousands of text files)
>
> Here's my attempt:
>
> get_lun, unit
> for i = 1,1000 do begin
>   openw, unit, 'File_'+ i + '.dat', /get_lun
>   printf, unit, 'my data will go in here'
> endfor
>
> IDL keeps saying filename argument must be a scalar string.
> Any help would be appreciated.
>
> Thank you.

Try
openw, unit, 'File_'+ i.tostring() + '.dat', /get_lun

or if you're using an older version of IDL,
openw, unit, 'File_'+ strtrim(i, 2) + '.dat', /get_lun

The reason is that when the interpreter sees the "+" and a number, it will up-cast the other
arguments in the expression to the highest precedence, rather than converting integers to strings.

Compare and contrast:
IDL> i = 10 & help, 'file_' + i + '.dat'
% Type conversion error: Unable to convert given STRING to Integer.
% Detected at: $MAIN$
% Type conversion error: Unable to convert given STRING to Integer.
% Detected at: $MAIN$
<Expression>   INT   =   10

IDL> i = 10 & help, '1' + i + '3'
<Expression>   INT   =   14

IDL> i = 10 & help, '1' + i + 30.0
<Expression>   FLOAT   =   41.0000

Jim P