
Subject: Create an array for data opened and read from text file

Posted by [smnadoum](#) on Fri, 10 Feb 2017 04:44:06 GMT

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Hi,

I might be over thinking this but I could use some help. I wrote this code that opens and reads data from a text file. I am trying to create an array for the data that was opened, read, and printed, however, my attempts for creating an array for the data are all unsuccessful: `mwell=float(x, logx, y)` . Can anyone identify the problem?

```
pro read_text, file, dir
```

```
dir='C:\Users\shereen\Videos'
```

```
file= 'C:\Users\shereen\Videos\test.txt'
```

```
n = file_lines(file)
```

```
x= fltarr(n)
```

```
y= fltarr(n)
```

```
logx= fltarr(n)
```

```
x0= 0.0
```

```
logx0= 0.0
```

```
y0=0.0
```

```
openr, iunit, file, /get_lun
```

```
for i= 0, n-1 do begin
```

```
readf, iunit, x0, logx0, y0
```

```
x[i]= x0
```

```
logx[i]= logx0
```

```
y[i]=[y0]
```

```
endfor
```

```
free_lun, iunit
```

```
for i = 0, n-1 do print, x[i], logx[i], y[i]
```

```
;;idl prints
```

```
0.115825  0.251150  0.344600
```

```
0.0822174 0.266348  0.406000
```

```
0.0674909 0.246855  0.531873
```

0.0985870	0.225174	0.506348
0.117978	0.189022	0.541152
0.119739	0.196804	0.457326
0.137261	0.221652	0.426978
0.128391	0.209696	0.400348
0.132717	0.247109	0.365717
0.103391	0.229152	0.312783
0.122043	0.221109	0.371478
0.0880652	0.277435	0.365022
0.157629	0.179771	0.360571
0.256195	0.256195	0.441024
0.262326	0.262326	0.454457
0.229582	0.229582	0.529491
0.185870	0.185870	0.588435
0.160543	0.160543	0.542522
0.178348	0.178348	0.531804
0.206630	0.206630	0.452717
0.239457	0.239457	0.405826
0.242913	0.242913	0.349891
0.277283	0.277283	0.365630
0.244478	0.244478	0.413913
0.225174	0.225174	0.478543
0.207629	0.207629	0.449314
0.389293	0.245756	0.389293
0.408196	0.222978	0.408196
0.433745	0.245418	0.433745
0.493109	0.219761	0.493109
0.435891	0.227109	0.435891
0.456435	0.257217	0.456435
0.450022	0.231522	0.450022
0.408457	0.235239	0.408457
0.392261	0.212826	0.392261
0.445522	0.261696	0.445522
0.413543	0.234130	0.413543
0.415348	0.217891	0.415348
0.441343	0.210971	0.441343

mwell=float(x, logx, y) ;I want to create an array for the printed data without changing the size, dimension, etc..

end

Thank you.

Subject: Re: Create an array for data open and read from text file

On Thursday, 9 February 2017 20:44:07 UTC-8, Cheryl wrote:

```
> Hi,
>
> I might be over thinking this but I could use some help. I wrote this code that opens and reads
data from a text file. I am trying to create an array for the data that was opened, read, and printed,
however, my attempts for creating an array for the data are all unsuccessful: mwell=float(x, logx,
y) . Can anyone identify the problem?
>
>
> pro read_text, file, dir
>
> dir='C:\Users\shereen\Videos'
> file= 'C:\Users\shereen\Videos\test.txt'
>
> n = file_lines(file)
> x= fltarr(n)
> y= fltarr(n)
> logx= fltarr(n)
> x0= 0.0
> logx0= 0.0
> y0=0.0
>
>
> openr, iunit, file, /get_lun
>
> for i= 0, n-1 do begin
>
> readf, iunit, x0, logx0, y0
>
> x[i]= x0
>
> logx[i]= logx0
>
> y[i]=[y0]
>
> endfor
>
>
> free_lun, iunit
>
> for i = 0, n-1 do print, x[i], logx[i], y[i]
> ;;idl prints
> 0.115825 0.251150 0.344600
> 0.0822174 0.266348 0.406000
> [...]
> 0.441343 0.210971 0.441343
```

```
>  
> mwell=float(x, logx, y) ;I want to create an array for the printed data without changing the size,  
dimension, etc..  
>  
> end  
>  
>  
> Thank you.
```

Hi Cheryl,

The array I think you are trying to create would be:

```
mwell = Float(3, n)
```

```
; and then,  
mwell[0, *] = x  
mwell[1, *] = logx  
mwell[2, *] = y
```

But since you know the structure of the file, the whole thing could be simplified (in the "IDL Way") as:

```
pro read_text, file, dir  
  
dir='C:\Users\shereen\Videos'  
file= 'C:\Users\shereen\Videos\test.txt'  
  
n = file_lines(file)  
mwell = Float(3, n)  
  
openr, iunit, file, /get_lun  
  
readf, iunit, mwell  
  
free_lun, iunit  
  
end
```

Another option is to use an array of structures, where you would just define mwell as:

```
mwell = Replicate({x:0.0, logx:0.0, y:0.0}, n)
```

(all else remains the same!)

... and then you can use "mwell.x" to refer to the array of 'x' values, which is clearer than using "mwell[0, *]". Same goes for mwell.logx and mwell.y.

I hope this helps!

Cheers,
-Dick

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