
Subject: Re: Having trouble stopping a loop (or loop de loop de loop)

Posted by [Jean H.](#) on Tue, 26 Aug 2008 16:46:26 GMT

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> 1.) I'm not sure how to start and more importantly, end this loop. I
> chose: while e_t lt 2 do begin to start it. The problem is that this
> loop will never be greater than 2 so it will never end and it just
> keeps repeating values ad nauseum in the output file.
>
> I don't want it repeating but I'm not certain how to start it and stop
> it to allow for no repeated values.

If I understand you right, you want to work with different values of e_t, but not with the same value twice. In this case, using "if" instead of "while" will NOT help you, as it will process your code only once, no matter what is the value of e_t.

So, you can keep your "while" loop, but you must also keep a copy of the previous e_t value.

```
e_t_previous = -999 ;(a value you will NEVER get in your code)
```

```
e_t = 1.4
```

```
...
```

```
while e_t lt 2 and e_t_previous ne e_t do ...
```

```
  e_t_previous = e_t
```

```
  ... ;change e_t
```

```
endWhile
```

Now, with this, you will still have the problem of comparing floats...

which you don't want to. Try

```
if 0.3+0.6 ne 0.9 then print, 'What??? 0.9 is not 0.9???'
```

```
then
```

```
print, 0.3+0.6, format = '(F20.10)'
```

```
0.9000000358
```

So basically you would do instead: e_t - 2 le epsilon, epsilon being small enough.

> 2.) for for c=0.006, 0.01, 0.004 do begin, I watch the output, but I
> don't see it change.

Of course it will not.

You INCREASE 0.006, by 0.01, UP to 0.004 ... 0.004 < 0.006 so this loop is never executed.

> 3.) i must of screwed something up in this segment:
> if e_t ge 0.45 && e_t le 0.9 then openw,1,'g:\Mars_tectonics
> \IDL_programs\paper_m_data\alba_eflank.txt',
> printf,1,x,c,o,e_t,format='(3f9.3)'

>
> because it worked before, but now I keep getting an error about
> unable to close 1, or something like that (just switched to compilation
> error).

Yes, if `e_t` does not satisfy this condition, the file will not be open... but you try to close it after that. You can't close what is not open.

do a "then begin", and put the "endif" after the "close" statement.

> As always, I appreciate any help that you may provide. After all I
> wouldn't be asking this question if it weren't for all your help :)

A good way to debug your program is to manually run it (or step by step if you prefer). Use it with different values and check if it behaves as you have expected. You would have noticed much of the problem in your code by doing that!

Jean

> Thanks,
> ~Matt
