Subject: Re: Problem reading data from stdin using EOF(0) in version 6.0 and 7.0
Posted by Allan Whiteford on Mon, 22 Dec 2008 15:52:45 GMT

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kiwing.to@gmail.com wrote:
> I am not sure if the EOF() function in IDL version newer than 5.2
> really has some problem or some setting has to be adjusted.
>
> I just want to read data from the stdin and automatically stop at
> the end-of-file. The following codes work for version 5.2 but not
> for version 6.0 nor version 7.0.
>
> Just want to know if anyway around it ?
>
> #######################
> ;--- test_eof.pro ----------------
> pro test_eof
> a=float(1)
> while not eof(0) do begin
>   read, a
>   print, a
> endwhile
> end
> ;---- end of 'test_eof.pro' -----
>
> #######################
> ;---- test_eof.idl ----------------
> .compile test_eof
> .run test_eof
> exit
> ;---- end of 'test_eof.idl' ------
> #######################
>
> When I ran it using "idl test_eof.idl"
> I got error at the end of my input.
>
> ### #
> IDL Version 7.0 (linux x86 m32). (c) 2007, ITT Visual Information
> Solutions
> Installation number: 60188.
> Licensed for use by: Academia Sinica
>
> % Compiled module: $MAIN$.
> % Compiled module: $MAIN$.
> : 1
>   1.00000
> : 2
>   2.00000

> : ^D
> % READ: Error encountered reading from file. Unit: 0
>   File: <stdin>
> % Execution halted at: $MAIN$ 3 /home/ericto/test_eof.pro
> ### ##

You can't check for eof(0) when you're giving input from the keyboard.

It can't know what you're going to type next so it returns a 0 and then
control passes to your "read, a" statement which subsequently fails when
you pass it an EOF character. The eof function never gets to see that
you typed Ctrl-D.

If you read from a file like this:

idl test_eof.idl < file.dat

then all will be well.

I don't know why it worked on IDL5.2 - I can only find versions 5.1 and
5.3 (typical!) and in both of them I see the same behaviour.

Maybe in IDL5.2 the EOF function detected it was attached to a keyboard
and blocked until it got another byte from the keyboard? It seems
unlikely but I think that's the only way the above example would have
worked in 5.2.

Thanks,

Allan