Subject: Re: executing a string in VM without using 'EXECUTE'
Posted by Allan Whiteford on Fri, 06 Oct 2006 09:30:20 GMT
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Gav,

Maybe I'm missing something but if your 'formula' is fixed then you
don't need execute at all, you can just write:

speci=where(mr[*,*,159] le 8 or $
        mr[*,*,170] gt mr[*,*,159] or $
        mr[*,*,235] gt mr[*,*,159],speccount)

Execute is only required when the code you're going to be running isn't
known at compile time. For instance if you had an interactive program
where a user could type IDL syntax into a text widget or at the command
line.

Thanks,

Allan

gav wrote:
> Hi Guys,
>
> There is probably a simple solution to this but I can't find it: I
> want to execute the string below in VM, without using (can't use) the
> 'EXECUTE' command. Any ideas / code etc greatfully received.
>
>
>   com='speci=where('+formula+',speccount)   ';write executable
> string
>   t=execute(com)   ;execute string
>
> the 'formula' is   "(mr(*,*,159) le 8 or mr(*,*,170) gt mr(*,*,159)
> or mr(*,*,235) gt mr(*,*,159))"
> cheers
>

Subject: Re: executing a string in VM without using 'EXECUTE'
Posted by Maarten[1] on Fri, 06 Oct 2006 09:40:30 GMT
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gav wrote:
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```
>
>      com='speci=where('+formula+',speccount)      ';write executable
> string
>      t=execute(com)      ;execute string
>
> the 'formula'  is   "(mr(*,*,159)  le 8 or mr(*,*,170)  gt mr(*,*,159)
> or mr(*,*,235)  gt mr(*,*,159) )"
```

extract constants in the array indexing, and the limits with the
strmid/stregex functions. Turn them into variables, and build the
equation that way. Something like this:

```
b = stregex(formula,
 '([0-9]+)[^0-9]+([0-9]+)[^0-9]+([0-9]+)[^0-9]+([0-9]+)[^0-9] +([0-9]+)[^0-9]+([0-9]+)',
/extract, /sub)
speci=where(mr[*,*,long(b[1])] le long(b[2]) or mr[*,*,long(b[3])] gt
mr[*,*,long(b[4])] or mr[*,*,long(b[5])] gt mr[*,*,long(b[6])],
speccount)
```

That is , assuming the structure of the formula remains the same, only
the values change. If you want something more general, you have to
explain where teh string comes from.

Maarten

Subject: Re: executing a string in VM without using 'EXECUTE'
Posted by greg michael on Fri, 06 Oct 2006 09:42:40 GMT
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I'm assuming your formula is just a sample, and that it could be any
other function of mr? I have the same problem (I posted something
similar a few months back). The conclusion was that the solution is to
write a code to break down the string and pass the pieces to the right
operators or functions (using call_function()) to assemble the result.
It's not an entirely trivial excercise... so far I still working with
execute().

Look here - seems you're trying to do something very similar:
 http://groups.google.de/group/comp.lang.idl-pvwave/browse_fr m/thread/d240948579293504

regards,
Greg

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