
Subject: Re: Problem Compiling and Using Functions
Posted by [David Fanning](#) on Wed, 04 Jan 2006 22:09:43 GMT
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someone@someplace.com writes:

```
> I'm having trouble getting simple functions to work. I have the code
> below in a single file named extract_tiles.pro. When I try and compile
> it gives me a syntax error on the line containing
> "extract_tiles_get_tile(fid)" in the extract_tiles procedure. If I
> change the function to a procedure, comment out the return statement
> and change the function call to a procedure call it works perfectly.
>
> It's probably a simple error, but I can't figure it out. I'm using IDL
> 5.6 and ENVI 3.6.
>
> FUNCTION extract_tiles_get_tile, flmg
> ENVI_FILE_QUERY, flmg, ns=ns, nl=nl
> print, 'Samples: ', ns
> print, 'Lines: ', nl
> RETURN, 0
> END
>
> PRO extract_tiles
> ENVI_OPEN_FILE, 'image.dat', r_fid=fid
> extract_tiles_get_tile(fid)
> END
```

Functions return a value. Try writing the function call like this:

```
void = extract_tiles_get_tile(fid)
```

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Subject: Re: Problem Compiling and Using Functions
Posted by [Paul Van Delst\[1\]](#) on Wed, 04 Jan 2006 22:48:28 GMT
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David Fanning wrote:

```
> someone@someplace.com writes:
```

```
>
>
>> I'm having trouble getting simple functions to work. I have the code
>> below in a single file named extract_tiles.pro. When I try and compile
>> it gives me a syntax error on the line containing
>> "extract_tiles_get_tile(fid)" in the extract_tiles procedure. If I
>> change the function to a procedure, comment out the return statement
>> and change the function call to a procedure call it works perfectly.
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>> It's probably a simple error, but I can't figure it out. I'm using IDL
>> 5.6 and ENVI 3.6.
>>
>> FUNCTION extract_tiles_get_tile, flmg
>> ENVI_FILE_QUERY, flmg, ns=ns, nl=nl
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>> RETURN, 0
>> END
>>
>> PRO extract_tiles
>> ENVI_OPEN_FILE, 'image.dat', r_fid=fid
>> extract_tiles_get_tile(fid)
>> END
>
>
> Functions return a value. Try writing the function call like this:
>
> void = extract_tiles_get_tile(fid)
```

Man, I heard the "D'OH!" all the way over here!

:o)

```
--
Paul van Delst
CIMSS @ NOAA/NCEP/EMC
```

Subject: Re: Problem Compiling and Using Functions
Posted by [someone\[1\]](#) on Wed, 04 Jan 2006 23:51:50 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Wed, 04 Jan 2006 17:48:28 -0500, Paul Van Delst
<Paul.vanDelst@noaa.gov> wrote:

```
> David Fanning wrote:
>> someone@someplace.com writes:
```

```
>>
>>
>>> I'm having trouble getting simple functions to work.
>>>
>>> It's probably a simple error, but I can't figure it out. I'm using IDL
>>> 5.6 and ENVI 3.6.
>>>
>> Functions return a value. Try writing the function call like this:
>>
>> void = extract_tiles_get_tile(fid)
>
> Man, I heard the "D'OH!" all the way over here!
>
> :o)
```

DOH!... Doh!... doh!... (echoing off into the distance) :)

Thanks for your fast response. It works now.

I'm new to IDL and I'm not used there being this difference between functions and procedures.

So, procedures don't return anything and functions **always** have to return something and the calling function/procedure has handle them correctly.

Thanks,
Mike

Subject: Re: Problem Compiling and Using Functions
Posted by [David Fanning](#) on Thu, 05 Jan 2006 00:13:10 GMT
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someone@someplace.com writes:

```
> DOH!... Doh!... doh!... (echoing off into the distance) :)
>
> Thanks for your fast response. It works now.
>
> I'm new to IDL and I'm not used there being this difference between
> functions and procedures.
>
> So, procedures don't return anything and functions *always* have to
> return something and the calling function/procedure has handle them
> correctly.
```

Yes, this is correct. But if you are going to write your

functions to return 0s, you have surmised correctly that you could just as well use a procedure. All arguments to procedures and function alike (including keyword arguments) can be passed by reference, so getting things into and out of procedure (as well as functions) is reasonably trivial.

Just keep chanting to yourself "IDL is NOT C, IDL is NOT C."

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Subject: Re: Problem Compiling and Using Functions
Posted by [R.Bauer](#) on Sat, 07 Jan 2006 23:04:21 GMT

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David Fanning wrote:

> someone@someplace.com writes:

>

>> DOH!... Doh!... doh!... (echoing off into the distance) :)

>>

>> Thanks for your fast response. It works now.

>>

>> I'm new to IDL and I'm not used there being this difference between
>> functions and procedures.

>>

>> So, procedures don't return anything and functions *always* have to
>> return something and the calling function/procedure has handle them
>> correctly.

>

> Yes, this is correct. But if you are going to write your
> functions to return 0s, you have surmised correctly that
> you could just as well use a procedure. All arguments
> to procedures and function alike (including keyword
> arguments) can be passed by reference, so getting things
> into and out of procedure (as well as functions) is
> reasonably trivial.

>

> Just keep chanting to yourself "IDL is NOT C, IDL is NOT C."

>

> Cheers,

>
> David

Hmm I think there was a change you could write a function which does not need a return inside. It's not that's I like this. I like a clear definition as above.

```
IDL> $more test.pro  
function test
```

```
end
```

```
IDL> a=test()  
IDL> help,a  
A      INT    =    0
```

cheers

Reimar
